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AN INQUIRY INTO THE THERAPEUTIC VALUE OF SULPHATE OF MAGNESIA, OIL OF TURPENTINE AND CALOMEL,

In Inflammation of the Intestinal Mucous Membrane, especially in Dysentery.

Read before the Connecticut River Valley Medical Association, July 3, 1861.

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In entering upon such an inquiry, which is confined to certain methods of treating acute and chronic dysentery, it is best to define clearly the disease which is intended. Dysentery, then, is an inflammation of the mucous membrane and the submucous areolar tissue of the large intestine. These coats are more or less thickened and reddened—the thickening is sometimes very great, even three or four times their normal thickness, and is the product of inflammatory exudation in and beneath their tissue, which exudation may be thin and serous, or more albuminous and plastic, and may even result in the formation of pus under the mucous membrane. The mucous

membrane itself is deeply redened and very soon dotted all over with minute superficial ulcers, round and not more than an eighth of an inch in diameter. It is most common to find the mucous membrane deeply red, swollen and covered with these minute ulcers. The inflammation is usually found to extend from the anus upward more or less, semetimes only through the rectum, at others throughout the descending colon also, at others through the entire large intestine. It is rare, however, to find it above the ileo-cœcal valve. This is, in brief, the anatomy of the disease.

The symptoms are generally proportioned in severity to the extent of the inflammation. In a large part of the cases which are met with in New England, the inflammation is limited to a portion of the large intestine—it is rare to have the whole tract, from ileo-cœcal valve to anus invaded The rectum rarely escapes. When it is not inflamed, we find tenesmus wanting, and the disease is more manageable. The disease begins with general febrile action, some uneasiness in the bowels, loose evacuations, pain, and in the course of twenty-four hours the characteristic discharges, attended with tenesmus, are established. These discharges are generally small, from one drachm to one ounce of mucus, blood and serum, without fæcal matter or odor. When small they are bloody mucus alone, when larger there is often serum with them. As they lie in the vessel they resemble masses of bloody jelly or sometimes broken bits of membrane, and when there is much serum, it is necessary to lift up portions with a stick, when the stringy transparent mucus, more or less stained with blood, is distinctly recognized. The evacuations vary in frequency from the smallest number up to so many that the patient has hardly left the vessel before he is called by another —and the severe pain in the rectum with distressing tenesmus are almost continual. Tenderness over part of the abdomen is a common symptom. It usually marks the extent of the inflammation in the large intestine. Besides the tenderness, however, along the colon, we almost invariably find a spot just below the umbilicus in the median line, which is painful on pressure, evidently not from subjacent inflammation—for the small intestine lies beneath. I have considered the extent of tenderness—indicating the extent of the inflamed portion —a valuable aid in early prognosis, along with the condition of the pulse; but there are cases in which there is no tenderness whatever on pressure over any part of the abdomen, although in all other respects well-marked cases of dysentery.

Dysentery sometimes occurs as a sequel of British typhus, and in these cases it is usually unaccompanied by tenderness. I have seen it so in some of these cases which were fatal after several weeks' illness, and presented after death evidences of intense inflammation of the whole large intestine—thickening, reddening and ulceration.

Tenderness and tenesmus, therefore, may be occasionally wanting; but we always have the characteristic discharges of mucus more or less mingled with blood.

It is not my intention to occupy your time with a complete account of the pathology of dysentery. Since I have said so much, however, I will merely add that vesical tenesmus is frequently a distressing accompaniment of dysentery, and that sometimes we have daily vomiting, but only in very grave cases. Indeed, continued vomiting must induce us to make an unfavorable prognosis.

Such is dysentery, as we see it in the large majority of cases in New England, a painful but not a dangerous disease, if well treated.

There are slight varieties in the character of the evacuations—in the amount of serum, or the occasional presence of bile; I have seen a case in which the blood was entirely wanting, the discharges consisting wholly, from beginning to end, of thick gelatinous transparent mucus, with tenesmus, pain and tenderness, as usual.

When dysentery is epidemic, we may find it having a much graver type than in the sporadic cases which we ordinarily meet with, and resembling more nearly the severe disease of tropical climates and camps. And we may occasionally meet with a sporadic case of violent and fatal character, just as we sometimes see a sporadic case of cholera asphyxia. I remember seeing a young man attacked with dysentery severely, who, before twenty-four hours had passed, was in complete collapse, cold, livid and nearly pulseless, and on the third day was dead. Such a case belongs to the same class with the congestive form of intermittent fever and the malignant form of scarlet fever. It has an element extraneous to the usual character of dysentery, an element which it in common with other acute affections in the rare instances has of the collapse just mentioned.

These cases are exceptional in their treatment, as they are in their nature. The course of medicinal treatment which I shall recommend does not refer to them, but to the cases of dysentery which we most commonly meet with.

There are three indispensables in the treatment of all cases. These are, absolute rest in a recumbent position, constant warmth of the surface, and a limitation of ingesta to a bland liquid diet.

After these comes the medicinal treatment. I will premise by reminding you that the views on the proper treatment of dysentery have varied from time to time for forty or fifty years, partly by the influence of the medical reports of men of the different countries, who have found so marked a variation in the type of the disease in different climates, that they have naturally advocated entirely different methods, which have sometimes been adopted by others with too little regard to varieties of climate and consequent variations of type. The common methods have also been changed from time to time, for sufficient reason found in actual changes in the character of the disease—which has in one epidemic obstinately resisted treatment to which it has been amenable at another time.

Thus the East Indian treatment was adopted in Europe and America—and in a climate so different as that of New England, and a disease so little like East Indian dysentery, bloodletting and salivation were the standard treatment at one time; though apparently with no more reason for it than there would be for that treatment indiscriminately at the present time. Cullen considered the troublesome symptoms in dysentery to be produced by the retention of hardened fæces, and his treatment by purgatives of a mild character has been much followed. I have sometimes seen dysentery begin abruptly with discharges of blood and mucus without any previous evacuation of the bowels. In such a case fæces would probably remain and produce more or less irritation. But in most cases there are several loose, more or less fœcal, evacuations, fully emptying the bowels, before the mucous discharges commence; and cathartics, for the purpose proposed, are needless.

Since the morbid anatomy of dysentery has been more accurately known, a revulsion of opinion has taken place in the medical profession. I well recollect the tone of the late Dr. Enoch Hale, of Boston, an earnest pathologist, on the occasion of the autopsy of a man who died of malignant dysentery at the Massachusetts General Hospital, in 1843, when the intestine was opened and exhibited an unbroken extent of intense inflammation from the ileo-cœcal valve to the anus, and not a particle of fæcal matter to be seen anywhere—when he denounced in no measured terms the plan of applying active purgatives to such a mucous membrane as that, as a proceed-

ing little short of barbarism. So a considerable part of the profession, with the same views, gave up purgatives, and adopted calomel and opium, acetate of lead and opium, or opium alone. Many holding on to the idea of the scybala, give opium and cathartics on alternate days.

Since 1852, I have followed a very different plan in the treatment of dysentery. My patient is put at once on frequently repeated small doses of a saline cathartic. I commonly employ the sulphate of magnesia in doses of one drachm, repeated every four hours. The object is not to get rid of scybala. If I had any reason to suspect their presence, I should give a full cathartic dose of castor oil at once. The object is to relieve the inflammation (or if used at the outset, the congestion) of the mucous membrane by procuring a free serous discharge from its surface. That this effect is produced to the great relief of the symptoms, and usually to the speedy cure of the disease, I have frequent evidence. This will be better understood, if I describe the course. A patient is having frequent dysenteric discharges, with all the other symptoms. He gets one drachm of sulphate of magnesia in concentrated solution, (which is important,) every four hours. The next day I find that his discharges have become large and watery, with little mucus and less blood, are less frequent and less painful. If they have thus improved, I reduce the frequency of the salts, but have it continued every six hours. On the second day my patient has only one or two discharges, watery, and absolutely without blood or mucus. The medicine is ordered once in eight hours, and the next day I find he has had no evacuation at all, and the medicine is omitted. This is the end of the case—for he goes two or three days without any evacuation, if he is careful, and then has a natural discharge. The pain and tenesmus have usually disappeared at the end of the first twenty-four hours, without any opium whatever. This is the history of four cases in five of dysentery when I see them at the beginning. If the case is more advanced, it does not yield so readily, and may require an opiate at night, while the salts are given during the day.

I have sometimes given the salts less frequently, with less favorable results—I have had reason to think that where the symptoms did not yield, it was because the medicine was taken at too long intervals. I prefer to withhold opium, in order that the salts may have their full effect; during the first day, the patient can be soothed and relieved by sinapisms and fomentations, with flannel bands around the body; and after this the pain is relieved.

My own favorable experience of this mode of treatment has been corroborated by others. I am unable to recollect the source from which I first derived the idea, but I have endeavored ever since to disseminate it, and I have had the pleasure within the last six months of seeing the plan advocated in several medical journals.

It is possible that the efficacious use of laxatives is not limited to sulphate of magnesia or to saline substances. I had a theory of their *modus operandi*, derived partly from Golding Bird—that they produced their effect by causing an exosmose of serous fluid from the inflamed mucous membrane, from which arose the necessity of using a concentrated solution. But some experiments by Headland seem to prove that the salts are taken up into the circulation before reaching the inflamed large intestine, and therefore some other explanation of their mode of action must be sought, which shall equally well account for the successful operation of some other cathartics administered in the same manner—that is, in frequently-repeated small doses. I refer particularly to castor oil. By the recommendation of Dr. West, the accomplished senior physician to the Royal Infirmary for Children, London, I have often found great benefit from the use of castor oil in small doses often repeated, in the dysentery of children. I do not know that the sulphate of magnesia would not operate as well with children as it does with adults, but I have never used it. Dr. West's formula for the castor oil emulsion is the following:

R. Ol. Ricini, one drachm; Pulv. Acaciæ, one scruple; Syrupi Simplicis, one drachm; Tinct. Opii, four drops; Aquæ Floræ Aurantii, seven drachms. M. Ft. Mistura. A teaspoonful to be given every four hours.

I have employed it with very happy results in many cases of dysentery of a somewhat chronic character in children. It has the advantage of being not unpalatable—children generally take it without any objection.

Like the epsom salts, castor oil in some way reduces the inflammation of the mucous membrane, and the secretion of bloody mucus rapidly diminishes, simultaneously with the abatement of irritation and pain.

I have spoken thus far of dysentery and its successful treatment, as it is seen in a large majority of the cases in New England. I have had but little experience with malignant dysentery or with grave epidemics, for they are extremely

rare in New England. I have no reason to think that the saline treatment would have the slightest influence in malignant dysentery. But in most of the cases that are met with during even a serious epidemic, I have little doubt that, if employed early, it will be found as effectual as it is in the milder form that it takes among us almost every summer and autumn. Its use is not inconsistent with the employment of stimulants, when they are required.

If, nevertheless, there are at any time non-malignant cases which do not yield at all to the use of saline medicines, or which, after a partial improvement, continue in a subacute form, what course promises the greatest and promptest success?

Let me first say that if the dysentery has yielded, but the patient is affected with diarrhœa, astringents and antacids with opium are the most appropriate remedies.

If after two or three days' employment of the saline, the discharges continue to be of bloody mucus, and there is little abatement of the other symptoms, it is time to resort to other expedients. In that case, I presume, no treatment promises better than a mercurial—a small dose of calomel with opium every six hours—under which we may reasonably expect a decided change for the better in the character of the evacuations, before enough has been taken to cause any considerable risk of ptyalism, except where there is an unusual sensitiveness to its effects.

I should say that I have very rarely been obliged to resort to mercurials with adults—for I have found very few cases that did not yield to the sulphate of magnesia. But in the "inflammatory dirrhœa" (West) of children, I have frequently prescribed small and repeated doses of calomel with opium, when other measures failed, and usually with promptly good effect.

From some experience with the oil of turpentine, I am inclined to regard it as a remedy very similar to mercury in its effects upon the intestinal mucous membrane. I have employed it more especially in the dysentery of children. When the castor oil emulsion has been taken several days or a week, and the child, after a partial abatement of the symptoms, has ceased to improve, the addition of a few drops of the oil of turpentine to each dose often has a decided effect upon the symptoms, so that the improvement in the evacuations begins again, and in a few days more they have acquired their healthy character and number. This is the history of

favorable cases, which in infants are of course less frequent than in adults.

The value of turpentine in chronic inflammations of the mucous membrane is perhaps sufficiently well known. Professor Wood has brought it into notice as a very useful remedy in an advanced stage of typhoid fever, especially on account of its prompt effect upon the ulcers of Peyer's patches, in promoting their cicatrization.

Three cases of chronic inflammation of the large intestine of moderate extent, mostly in the rectum in two of the cases, have been under my care within a few months past. They were all treated with the oil of turpentine in three daily doses; all began to improve in a few days, and two entirely recovered.

Turpentine is especially useful in dysentery when the first stage of active inflammation has passed, with dysenteric symptoms still remaining, and the patient presenting an appearance of morbid prostration. Exhibiting, in fact, a condition evidently requiring stimulation: feeble pulse, and livid extremities, with tendency to coldness of the surface, and perhaps the tongue dry and the teeth covereed with sordes. Dr. Wood makes the dry black tongue and the sordes the indication for the use of turpentine in fever. He says: "There is a particular state of fever usually attended with much danger, in which we have found this remedy uniformly successful. The condition of things alluded to, is one which occurs in the latter stages of typhoid fevers or lingering remittents, in which the tongue, having begun to throw off its load of fur in patches, had suddenly ceased to clean itself, and becomes dry and brownish. The skin is at the same time dry, the bowels torbid and distended with flatus, and the patient sometimes affected with slight delirium. Under the use of small doses of oil of turpentine, frequently repeated, the tongue becomes moist and again coated, the tympanitic state of the bowels disappears, and the patient goes on to recover as in a favorable case of fever. We are disposed to ascribe the effect to a healthy change produced by the oil in the ulcerated surface of the intestines." (*U. S. Dispensatory*, Art: *Oleum Terebinthinæ.*)

With regard to the use of calomel in dysentery, there appears to be reason for doubt that its efficacy depends upon any direct influence over the functions of the liver, as is very frequently alleged by medical men, or that the necessity for its exhibition rests on any hepatic complication. I shall only

argue against these suppositions by the statement of two or three facts of modern observation.

It has been inferred from the green color of the evacuations that is often seen after calomel has been taken, that an excessive flow of bile had taken place into the intestine, under the immediate influence of the mercurial upon the liver. "The green stools," says Pereira, "which sometimes follow the administration of calomel to children, are usually supposed to arise from the action of this medicine on the liver; though Teller thinks it depends on alterations produced in the condition of the blood. The same colored stools are frequently observed when no mercury has been used, and there does not appear to be any just ground for abscribing them to the calomel." It will be remembered that one of the first results of a slight exposure to the cold in an infant, is the passage of green stoods, with griping pain. West says, that in some cases the green discharges probably depend on the action of the acids of the alimentary canal upon the coloring matter of the bile (biliverdine) in the evacuations—which is probably the explanation of these cases of green stools following a chill. When the discharges are greenish in the course of dysentery, Golding Bird's investigations have rendered it probable that it results partly from the presence of altered blood in the evacuations.

Thus we have one fact—that the green stools are very common under various circumstances, unconnected with the use of calomel.

Another fact is, on the authority of Dr. Thudichum, of London, that calomel, whether it purges or not, does not increase the quantity of bile excreted, but on the contrary it diminishes it. If the liver is relieved by the use of calomel, it is through its effect upon the intestines and the portal circulation, just as it would be relieved by other cathartics. This is proved by the experiments of H. Nasse, Kolliker, and H. Muller. The green color of the stools which follow the use of calomel is really due to sub-sulphide of mercury, just as the black color of stools following the use of preparations of iron, is due to sub-sulphide of iron. (*Thudichum.*)

We have reason, then, to know that calomel does not produce that increase in the biliary secretion and discharge, which many have considered indispensable to the relief of various cases of intestinal disturbance. And we may fairly infer that whatever advantage is derived from the use of calomel, as of turpentine in dysentery, is due to its direct effect upon the capillaries of the intestine, as a special stimulant.

Whether turpentine might not be employed with as great advantage as calomel in cases that seem to require either of them, my own experience will not allow me to say. I have seldom used calomel since I began to treat dysentery with sulphate of magnesia, nine years ago. Calomel would be unsafe in a very advanced stage of the disease, when there was any pus in the discharges, and the vital force was low—while these are the very conditions in which the use of turpentine, a nervous stimulant, would be especially appropriate. (*Berkshire Medical Journal.*)

SANITARY SCIENCE IN THE CAMP.

Being the Conclusions of the Commission appointed by the British Government, to Inquire into the Sanitary Condition of the Army in the Crimea.

BY GEORGE W. WILDE, M. D., of London.

Although it has been my fortune to spend a considerable portion of my professional life abroad, I still take a deep interest in the political affairs of my native country, and would gladly add whatever of influence or power I may possess to sustain a Government, the wisest and most beneficient ever created, in its efforts to maintain its supremacy. That the Federal Government will have an army of any dimensions which it may require, I do not doubt; nor do I doubt the results of the war. The old flag—the stars and stripes—will long continue to float an emblem of a united and a free government; not only over every inch of our national domain, but in every harbor of the civilized world.

But the question of vital interest to me is, will there not be an immense and needless sacrifice of life from preventible diseases in an army so quickly collected from among the people, and so unaccustomed to the habits and pursuits of the soldier's life? I am glad to learn that this subject has already engaged your attention, and that measures have been taken by government to remedy these evils.

My attention has been repeatedly called to the sanitary condition of troops in my travels on the continent and

in the East; and my observations have given me the liveliest apprehensions in regard to the health of the vast army now assembled along the borders of the Southern States. Unless the highest degree of intelligence in matters relating to the management of troops in camp, and in the field, is possessed by the medical staff, the disasters by sickness are far more to be apprehended than reverses on the battle-field; as American physicians have had little actual experience in military life, and as the medical literature of military surgery has to be obtained, for the most part, from abroad.

Yet, it has occurred to me, that there is a large fund of facts relating to the hygiene of armies contained in public documents, and hence quite inaccessible—at least to the majority of medical men. The record of many of these investigations are rich in the fruits of sanitary science applied to armies. I believe I cannot do my professional brethren at home, who are now engaged in their country's service, a better service than by giving at some length, and in detail, except where condensation is possible, the results of some of these official inquiries.

The following are the conclusions of the Sanitary Commission sent to the Crimea by the British government, to inquire into the sanitary condition of the troops. They will be seen to embrace the most important facts relating to the hygiene of camps, and are the result of a series of long and laborious observations:

PRACTICAL CONCLUSIONS RESPECTING THE CAMP.

I. That by far the greater part of the disease and mortality existing in the camp, when the Commission arrived in the Crimea, was due to zymotic maladies, such as cholera, fever, diarrhœa, and dysentery.

That besides the effects of topographical and climatic peculiarities connected with the occupation, and making allowance for the predisposing influence of other conditions, to which the troops had been exposed, the prevalence of zymotic maladies was obviously connected with local favoring causes, essentially the same in kind as those observed in civil life, especially in rural districts, namely:

Damp.

Impure Air.

(Although in a minor degree) Impure Water.

II. Attacks of zymotic disease were observed to be connected with the three following sources of dampness:

A wet subsoil; a retentive surface soil; confined locality.

1. Of these three conditions, *a wet subsoil* occasioned the largest proportional amount of sickness.

The experience of the 79th Regiment, and that of the 31st and Royal Artillery, who were successively camped on the same ground, below Marine Heights, proves that one of the worst sites for a camp is that in which a thin bed of porous material rests upon an impervious bed beneath, which retains the water, and keeps the subsoil charged with it, while the surface may afford little or no indication of the fact.

Dangerous sites of this kind were often marked by a greener or more vigorous vegetation than that of the surrounding district, or by water-springs coming to the surface, or by evening fogs setting over them sooner than over the adjacent country.

Before selecting positions for camps in unknown ground, it would be very advisable to dig trial holes a few feet deep, to ascertain what is the condition of the subsoil drainage, and not risk the health of the men in camping on ground in which these trial holes show the presence of water near the surface.

Should it be necessary, for military reasons, to hold a position on a wet subsoil, the whole should, if practicable, be thoroughly drained by deep trenches, and if there be a hill-side or water-shed above the ground, the surface water from it should be turned aside from the site by deep, catch-water drains, as was done with the camp of the Highland Division at Kamara.

If the position be such that deep trenching and draining cannot be carried out, it is in the highest degree probable that if held for any length of time, it will be at a considerable sacrifice of the force.

2. *The retentive character of clay surface soils*, and the difficulty of draining such soils, render it advisable to avoid them as camping-grounds, when it is possible to do so.

Wet clay soils keep the air near the ground damp and cold, and they affect the atmosphere of tents and huts in a similar manner. There was sufficient proof of their injurious effects on the health of troops in the Crimea.

Where such soils must be occupied, for military reasons, the defects in the natural drainage should be remedied, as far as practicable, by trenching the ground, and by trenching the site of every hut and tent separately, connecting the hut and tent drains with the larger trenches. In this way, not only are the sites and the vicinity of the huts and tents kept com-

paratively dry, but the surface water is more readily removed, the exhalations from the damp soil diminished, and the air purified. The experience of the army in the Crimea showed the very beneficial effects of this surface drainage and trenching on the health of the troops.

3. *Dampness of the air, arising from the nature of the locality*, proceeds from the topographical peculiarities of the ground preventing a free circulation of the air, and the atmosphere becoming stagnant, and charged with moisture and emanations from the ground. The valley of Karani above Kadikoi afforded an illustration of this, in certain states of the weather.

It was observed in other parts of the seat of the war in the East, that damp white mists, settling in valley or hollows occupied by troops, had been the precursors of epidemic diseases, especially of cholera. All valleys are at times exposed to similar occurrences, especially such as contain stagnant lakes. An unhealthy and stagnant state of the air is sometimes increased by brushwood or trees.

There is often no escape from epidemic sickness occuring among troops from the occupation of such positions; they should, therefore, be avoided or abandoned.

III. The evils resulting from these local causes of dampness were not unfrequently aggravated by the manner of pitching tents and erecting huts. Want of due preparation of the ground and defective drainage of the site, often led to a damp state of the air within huts and tents, and induced a tendency to fevers.

Deep trenching round the tent-site, as already mentioned, is the best remedy, and in case of huts, the site should be isolated from the surrounding ground, and the area to be occupied by the hut, drained by a trench dug round it at least a foot below the level of the floor.

If it be not practicable to drain the subsoil, and if the position must be held, adequate provision should be made with any materials at hand for raising the beds of the men above the ground.

Huts should never be banked up with earth against the wood. The experience in the Crimea has shown that it is a dangerous practice, for it used to be a common cause of fevers. An interior lining, even of old newspaper, affords a much better, and at the same time a perfectly safe protection from draughts.

The flooring of huts should be occasionally raised, the sur-

face of the ground below cleansed, and quicklime and charcoal strewed over it.

For hospital huts, an interior lining of boards, or building a rough rubble stone wall outside, as was done in many of the regimental hospitals, affords the requisite protection from weather, and from sun heat.

IV. The camp before Sebastopol was, generally, remarkably clean when first visited; but there were in certain situations sources of atmospheric impurity from putrescent organic effluvia, likely to influence injuriously the health of the troops. The chief of these were:

Picketting-grounds, and manure heaps.

One or two slaughtering-places, and latterly the large cattle depot and slaughtering-place at Kadikoi.

The graveyards and putrid marsh near Balaklava.

Latrines kept too long open, and exposing too large a surface.

When an army can shift its ground at will, danger to health from similar evils can always be avoided by doing so.

When, on the other hand, an army is tied to its position for a length of time, the camp becomes a town, and is subject to all the sanitary defects of towns, as these existed before the introduction of the first great step that was taken for improving the public health, namely, the introduction of paving.

Picketting of horses saturates the ground they occupy with organic matter. In like manner, accumulations of manure, if allowed to remain, saturate the ground they cover. Filth of any kind is washed into the ground by the rains, or trodden into by the steps of men and animals, and must necessarily give off impure emanations under the joint action of sun, heat and moisture.

To avoid the injurious consequences likely to arise from these circumstances, it is indispensably necessary to observe the most scrupulous cleanliness over the whole surface and vicinity of a camp. All refuse should be at once swept up, and removed to a distance. None should ever be allowed to accumulate within, or in the immediate vicinity of a camp.

Bones and refuse of food can be most easily disposed of by burial.

Stable litter and all inflammable refuse should be carefully burned. The usual method of forming heaps of litter and firing it, is imperfect. Before being fired, it should always be opened up, to admit the air to dry it, and to expedite the combustion. Manure heaps burn with difficulty, if left on the ground for any length of time before they are fired.

Carcases of animals and offal should be buried to a sufficient depth below the surface. Three feet is enough under ordinary circumstances. Refuse charcoal dust thrown over tainted ground will assist in deodorizing it, or, if that be not obtainable, the burning of stable litter on the spot will furnish sufficient charcoal for the purpose.

Latrines should be made narrow and deep; a quantity of earth should be thrown into them each day, until they are filled within two feet of the surface, after which the latrine should be filled up, and another dug.

When an army requires to occupy the same surface of ground for years, it would be unsafe to bury the refuse in the ground, because eventually the soil would become saturated with organic matter, and dangerous to health.

In such a case, the construction of furnaces to consume every organic product of the camp, is far the best and safest proceeding. Speedy collection, removal, and destruction by fire of all such refuse matters obviates any risk of danger from them.

V. *Atmospheric impurities arising from overcrowding and defective ventilation of tents and huts*, were a frequent predisposing cause of zymotic disease.

Were it practicable in warfare to diminish materially the number of men sleeping in tents, it would be advisable to do so.

But considering the limited transport at the command of an army in the field, the injurious consequences of overcrowding may, to a considerable extent, be obviated by a free ventilation of huts, and by improving the construction of tents and marquees, by introducing effectual means of ventilation round the top of the poles.

In the case of huts, ridge ventilation is the most efficient.

Lime-washing huts inside, especially hospital huts, purifies the air; lime-washing of huts outside protects them, to a certain extent, from the intense sun's rays, and keeps them cooler within.

The usual effects of striking tents and shifting ground is an excellent means of avoiding the effects of saturation of the earth by emanations proceeding from the breath and bodies of the men.

VI. The condition in which the water was drawn for use in the camp was likely, especially during the prevalence of cholera, to aggravate the severity of the disease, although not to a great degree.

It is always desirable that water for drinking and cooking purposes should be as nearly as possible destitute of color, taste, or smell. Anything that interferes with these three natural tests is more or less injurious to health; but marsh water, however apparently pure, is not wholesome.

All engineering works for supplying camps with water should comprehend—

The selection of the purest obtainable source.

The delivering the water for use as pure as it is at its source.

If it be necessary to pound the water, the tanks should be covered.

Water should, if practicable at all, never be drawn by dipping, if it be rendered muddy in the act of being so drawn.

If a source of water of sufficient purity be not obtainable, the water should be filtered. A filter may be made with sorted gravel, clean sand, and charcoal.

Every trough for supplying horses should have a separate inlet and overflow.

GENERAL CONCLUSIONS FROM THE WHOLE EXPERIENCE.

I. That as scurvy, and the forms of disease connected with it, almost disappeared from the army under the influence of improved diet, clothing, etc., so, in like manner, zymotic diseases, the destructive effects of which mainly depend on breathing a humid, tainted atmosphere, declined on the carrying out of suitable sanitary works and measures.

II. That men just arrived in a new country are especially liable to suffer from prevailing zymotic maladies. That any given number of reinforcements will not compensate to the service for the loss of the same number of the original force from these diseases, and hence the necessity for effective sanitary precautions is doubly imperative, whether as regards the abatement of local favoring conditions, or the discovery and immediate treatment of the premonitory stages.

III. As the result of their whole experience, the Commissioners beg to express their opinion, that, inasmuch as the neglect of military hygiene, whether as regards the soldier personally, or the sanitary condition of camps, barracks, and hospitals, has hitherto, in all countries, climates, and seasons, been the cause of the largest amount of loss in armies, the whole subject, closely connected as it is with the physical efficiency of Her Majesty's forces, demands in future a practical development commensurate with its importance to the public service.—*Am. Med. Times.*

DESCRIPTION OF THE "BRIGADE CASE,"

DESIGNED BY

H. S. HEWIT, M. D.,

Formerly Assistant Surgeon U. S. A.

AND RESPECTFULLY SUBMITTED FOR THE APPROVAL OF THE MEDICAL STAFF OF THE U. S. ARMY.

The case described below is one designed by the writer to meet a surgical want hitherto unsatisfied. It is intended to contain every instrument which can be useful in any emergency, and, with the instruments already in possession of the staff, will furnish a complete *armamentarium chirurgicum*.

It consists of the following instruments:

For Amputations.—Four amputating knives; two amputating scalpels; one amputating tenaculum; one capital saw; one finger saw; two spiral tourniquets.

For Trephining.—Two trephines; one Hey's saw; one elevator.

Forceps.—One Liston's straight bone forceps; one Isaac's bayonet do.; two Lüer's bone-gnawing forceps; one Strohmeyer's stumpholding forceps; two tooth forceps; two Lüer's artery forceps; one torsion forceps; one thumb forceps; one mouse-tooth forceps.

Saws.—One Strohmeyer's saw; one saw à dos mobile; one saw guard.

Trocars and Catheters.—One curved rectum trocar; one straight trocar; one partition catheter; five silver catheters, 1, 3, 5, 7, 9; one silver catheter for prostrate, 12; one steel staff grooved; twelve English flexible catheters.

Needles.—One Mott's artery needle; one right Deschamps' artery needle; one left Deschamps' artery needle.

Bistouries and Scalpels, &c., &c.—One sharp-pointed straight bistoury; one probe-pointed straight bistoury; one probe-pointed curved bistoury; one sharp-pointed curved bistoury; one hernia bistoury; four scalpels; one tenaculum; two double hooks, sharp; two double hooks, blunt; two retractors; one pair of Musseux's forceps; one pair of polypus forceps; one pair of dressing forceps; one pair of heavy straight scissors; one pair of ordinary straight scissors; one pair of curved scissors; one silver director; one steel director;

one Schleswig bullet forceps; one Hamilton's bullet forceps; two double trachea tubes; one Lüer's articulated œsophagus tube; one wire suture needle; two eye needles; one vaccinating scarificator; one hard rubber four-ounce syringe; silver probes, wire, and suture silk.

It will be observed that amputating, trephining, resecting, and artery instruments are here comprised, together with tracheotomy tubes, trocars, and the silver suture needle.

The dimensions of the case are, length, 18 inches; breadth, 13¾ inches; depth, 2½ inches. The weight is 19¾ pounds, and with the containing leather valise, like case, will be upwards of thirty pounds.

It is intended that the exterior case shall be made five inches in depth, the lid to contain rollers two and a half inches wide by seven yards long, placed on end, and lint, cerate, oil, chloroform, and sponges, so that with this case occupying no more room than a common travelling valise, any amputation, resection, ligature, or other operation can be performed, or any wound dressed except those requiring spints.

The undersigned respectfully recommends that one case similar to the above be furnished to every surgeon and medical director of the regular army, and to every brigade surgeon of the volunteer forces.

The case itself is made of tin, japanned, and is as compact and light as a complete case can be made.

It is not intended for hand transportation, excepting for short distances. It is of convenient size for any other conveyance or for packing.

The instruments have been made and arranged by Mr. Jules Teincken, of Astor Place, agent for A. Lüer, of Paris, whose name alone is a guarantee of excellence of material and workmanship.

The present aspect of surgery, and the experience of the Schleswig-Holstein war and the Crimean war, urge imperatively upon all military surgeons the cultivation, according to their means and circumstances, of conservative surgery. The above case furnishes all the instruments necessary for resecting bones or joints, excepting the chain saw, which has been omitted on account of its extreme liability to get out of order. The saws in the case, it is believed, will answer every purpose of the chain saw.

The long, hollow, silver suture needle is added under the belief that silver or other metallic sutures are destined to occupy a high place in both ordinary and conservative surgery.

It is the intention of the writer to make trial of the silver thread if he has opportunity (silver wire twisted over silk) both as ligatures and sutures, and report the result.

The high claims of the profession, the future of medical and surgical science, and the great and ever present cause of humanity urge the profession, both military and civil, to high heroic and noble enterprise.

Let us see that history record that no life or limb was sacrificed in the present war which sanitary science and foresight or surgical skill could have saved; and let our profession seize the present glorious opportunity to demonstrate its value and utility in times of real danger and distress. If quackery hereafter has a front to show, it will be simply our own fault. —*Am. Med. Times.*

THE CHEMICAL TREATMENT OF DISEASE.

BY C. B. HALL, M. D.

The short time I can spare for an essay could be readily occupied in naming the different hypothesis advanced for the explanation of the *modus operandi* of medicines, all at variance with one another, all failing when put to the test of practice, and yet none without some grounds of physiological truth for their foundation.

I propose, therefore, that we leave as we find them those sound principles of nosology that have stood already the experience of men of learning and thought, and devote a few minutes to the consideration of Liebig and Muller's opinion that inflammation is an oxydized state of the proteine, and that all disease is the result of disarrangement of the affinities of particles, and see how far a chemical treatment may serve as an adjunct to a regular course of medicine. We do know of strange animal changes constantly attending the animal economy. Thus, in the normal state, the gastric juice, the almost first stage in nutrition, is acidulous, while the blood, the result of this digestion, is alkaline. Again, we have the secretion from the liver, the largest secreting organ in the body, with an alkaline base, while the product of the no less important organs, the kidneys, is uric acid. We have also the oleaginous and albuminous secretions, the representatives of

nitrogen and carbon, as we find others of oxygen and hydrogen, the two other elementary principles of all organic compounds. This in the healthy state. How innumerable the effects of their slightest variation in disease! not acknowledging the theory that this constitutes disease, but simply viewing them as coincidents and their regulation as concomitants.

Take, for instance, the simplest form of congestion, or perhaps more properly, torpor of the liver, found in the moderate drinker, particularly the beer-drinker, and more particularly when in moderation he has taken a little extra, with a few glasses of spirit; you find the tongue coated with heavy white fur, the gums pale and the fauces dry, the patient complaining not so much of constipation of the bowels as a difficulty in passing what he calls a gummy, sticky sort of substance, which clings to him with the tenacity almost immovable, and of a dark green color, with very little odor, and attended by smarting, but no pain. The usual remedy for this is blue pill and black draught, or, as an old friend of mine in the country takes, ten grains of submurias hyd., followed by salts and senna. Chemically this is an acidulous excess, both in stomach and liver, and ten grains of carbonate of soda to act on the stomach, and ten of bitart. potass. to neutralize the hepatic secretion, in a glass of cold water, will often effect a cure in a few hours.

One of the most troublesome attendants of bilious as well as of infantile remittent fever, is the constant passing of green bile with mucus, showing its irritating effect on the membrane, thus provoking the febrile action and otherwise retarding the cure. I do not mean to say that liq. potass. or any other preparation of that alkali will cure bilious fever, but there is no doubt their use will correct this abnormal secrection, and thus effect one of the most important indications.

On the treatment of dysentery or diarrhœa, or whatever name you give to the various bowel complaints of children, you find a double action, or one extreme running into the other. If you are consulted in the early stages, you find the tongue slightly coated, but white, appearing as if the child had just taken a drink of milk. The stools green, somewhat painful, but not frequent, &c. This is usually treated with antacids, as eyd. c. creta, with creta c. opii cemp., or barb. soda, so that I have no particular point to call your attention to. But what is far more likely, you do not see the case till various pills and potions have been administered by the too

confiding parents, suggested by the too-knowing neighbors, *whose children have been exactly the same*, and cured by the far-famed remedy. You find the tongue coated in the centre with a dirty white, inclining to brown, the tip and sides red, the fauces, gums and lips of the same color; a painful expression of countenance, with a whining, feeble cry, constantly picking the lips or ends of its fingers; stools more frequent, of the color of the coating of the tongue, more painful before each motion, and increasing in frequency, &c., and you will invariably find an alkaline reaction, the stools often effervescing with nitric acid. Whatever course of treatment you would suggest, you would find its efficacy most wonderfully advanced by an acid accompaniment, such as tr. ferri muriatis. Or still further, you might find the eye sunken, with a dark areola; skin something of the color of the tongue; flesh full, but flabby and doughy, with other strumous indications. Here is an opportunity for a double chemical action. Feed the child on starch, and give diluted nitric acid. You will not only furnish the best nourishment, and counteract the excess of alkali in the system, but nitric acid converts the starch into oxalic acid, than which no remedy appears to have more specific power over the strumous diathesis.

Take another familiar example with children, one in which you have no doubt been sorely tried, and wished, like the man of old, "your enemy would write a book" on it. A child at breast—the mother, strong and healthy, eats her meals with relish, has plenty of milk for the child, even more than it requires. This you find, on standing in the glasses, rich, and covered with thick, almost buttery cream. She tells you the child nurses freely, and throws it up without any curdling. Bowels inactive for a few days, then three or four motions a day for a few more. Pulse, feverish, child pale, fretful, crying and whining constantly. Here is a case of infantile indigestion, tending to cachexia. You prescribe infusion of cinchona, or some tonic, but without avail. Chemistry says, if you give that child sugar, it will convert the casein of the milk into lactic acid, the natural gastric juice of the child, and experience confirms the magical effect.

A white tongue is not characteristic of pneumonia (I mean a clean white, like milk, distinguished from the snow white of inflammation); but your experience will call to mind many cases of this formidable disease with this anomalous attendant, and its no inconstant fellow symptoms of an acidulous action, the discharge of green bile. The chemical treatment

in this case is to combine liquor potassæ or bi-tart. potass. with your other remedies.

Rheumatism has been so frequently associated with excess of acid, that theorists have, for a few years past, laid down an alkaline course of treatment—but that excess of acid in the acute, or of alkali in the chronic, is symptomatic of the disease, I utterly deny. And here, in an opinion at variance with such a name as Golding Bird, let me ask if your own observations will not join me in the assertion that there is a marked difference between rheumatism in Europe and rheumatism in Canada, particularly those of you who have had an opportunity of seeing cases in the hospitals of London as well as this country. Nothing struck me more forcibly. Not to detain you with the question just now, I may allude to the well known fact that in England the chronic form tends to rheumatic gout, while in this country it assumes the nature of palsy. However, that the excretions in some cases, and often in certain stages of the same case, will acknowledge the test of alkaline and acid excess respectively, I think I may safely state as proven; hence it is our duty to seek out the adominitions that chemistry suggests, and govern ourselves accordingly.

The powerful antiseptic and disinfecting effects of chlorine have been long known, but until the accidental discovery of chloride of pottassium, a few years ago, the different forms in which it was necessarily administered contained objections commensurate with its advantages. This salt is free from any of the difficulties of former preparations. Not so caustic for local use as chloride of lime, and more effective than the chloride of sodium, it imparts its chlorine readily, and leaves the potass. as mild a caustic and gentle stimulant as could be wished—and whenever it has been applied to fœtid and indolent ulcers, the whole array of yeast and charcoal and other carbonaceous applications have fled before it in confusion. In that modern and most dreaded disease, diphtheria, there appears to me to be no safety in any other remedy. This is a malignant fever with putrid sore throat, the whole lining surface of the fauces and pharynx throwing off a false membrane, which again immediately forms attachments in places, and thus hastens dissolution by a mechanical obstruction. Gentlemen, whose opinions I cannot but respect, still place their trust in the nitras argenti; but its application is very difficult, as it should touch *only* certain places, and its effect uncertain, while two or three free applications of the chloride

of potass. with a sponge, will almost completely remove the local difficulty, and leave you a fair wind and open sea.

Thus I have viewed chemistry only as an adjunct or a chief assistant at our labors; but as we rise in the scale of disease, and find, as we do, our difficulties increase and our skill more at fault, we may be induced to look to this science as the polar star in our distress, and the guiding spirit to carry us through the storm. To include under one general term, the different disorders of this kind, such as albuminuria, tuberculosis, phthisis, &c., I will speak alone of scrofula or general cachexia, and of course will not attempt any minutiæ of detail.

We find an excess of fluid over the solid part of the body, as well as deficiency in fibrin or muscular fibre, and often total want of some important constituents of health, such as phosphorus and sulphur. Or we have excess of hydrogen, with loss of nitrogen. On the use and distribution of these two elements depend, almost solely, our hopes of cure; simply using carbonaceous and oxygenated substances as nourishment, to keep good the supply and preserve the waste, until we can affect a change in the other ingredients. That chemical changes do not take place with the same certainty and regularity of the system, influenced by vitality, as in the alembic and under our observation, I am willing to admit; but that these changes are more or less definitely and correctly effected while circulating in the blood, I think can be as clearly proven. As an instance, and as it constitutes a most important part in our curative process, give, for a few days, cod liver oil with phosphate of lime, and you will detect the dumb-bell crystals of oxalate of lime in the urine. Now, this can only be effected by the change of carbonic acid and carbonic oxide into oxalic acid, which from its stronger affinity sets free the phosphoric acid and unites with the lime. This change is easily produced in some part of the transit through the circulation.

Raw beef, pounded to shreds, has of late received the approval of the London and Continental Hospitals, as food in these cases upon physiological reasons, particularly its ready transformation with little effort of nutrition to the much needed fibrin*—but we also find that the pounding divests it of its cellular substance or cellulose, which is composed of hydrogen and oxygen in the exact proportions of warm water. So the three, carbonic, oxalic and tartaric acids, to which so much

* Mr. Hall certainly does not mean to say that fibrin and muscular fibre are one and the same thing?—Ed.

importance has been attached, contain, two of them none, and the other a very small proportion of hydrogen, which may materially check that ready solvent from carrying the most important solids out of the system. I cannot agree with the one-man power of Dr. Churchill, about the use of hypophosphites, but have no doubt of their most important efficacy when combined with cod liver oil so as to produce the chemical transposition before mentioned.

The chemical indications of cure, therefore, consist in the proper regulations of hydrogen and nitrogen. The first by keeping from the system all such articles of diet as contain the elements of water, and using for medicines, like medical compounds, the few acids I have named. The second by conveying into the system as much as possible of substances rich in nitrogen. Of these the principal are nitric acid, nitrate and cyanide of potass., and the different preparations of ammonia, the chief of which is the muriate—with articles of diet confined to caseine of milk, albumen of egg, and fibrin from beef and mutton.

Fruit, often highly recommended, derives its principal advantage from the long mastication required, causing a greater quantity of atmospheric air to be conveyed to the stomach with the saliva.—*British Am. Jour.—Pacific Med. Jour.*

INTERCOURSE AS AFFECTING UTERINE DISEASES, AND THEIR TREATMENT.

BY AUGUSTUS K. GARDNER, M. D.,
Professor of Clinical Midwifery and Diseases of Women.

This case is one of an ordinary character; some uterine congestion, hypertrophy of the cervix, etc. It is not especially interesting in itself, but in connection with it, the question is raised, *Whether sexual intercourse is or is not to be avoided during the treatment*, or in order to effect a cure? Very frequently during my course of lectures this winter, I have alluded to the fact that various diseases of the female organs were aggravated, and produced by the sexual congress; yet still the subject has been but imperfectly presented. This morning, I will still further elucidate it. Coition is so important a physiological function, and it is so difficult for the young practitioner to learn respecting the ills which arise from its

abuse, either from actual experience of their treatment, or by their study in scientific works which allude but very imperfectly to them, that the theme may well deserve your serious and most studious attention, as it may not only save embarrassment, but also enable you the more easily to recognize and properly treat the many ills which result from overaction in this direction.

The earliest period to which the physician is summoned on account of physical injury happening to the female is immediately after the consummation of the marriage. It is too often the case that, inspired with the idea that every man must in like circumstances perform his part manfully, that the husband does it brutally, and the immediate result is a *laceration of the hymen fourchette* and soft parts, followed by hæmorrhage, sometimes so profuse and uncontrollable as to demand the physician's attention. Usually, this hæmorrhage will be easily arrested by cold water, ice to the vulva, or what is less dangerous, pressure, or a pledget of lint wet in solution of the liquor perchloride or sulphate of iron, more or less diluted, and pressed firmly upon the bleeding part; sometimes a little arterial vessel is ruptured, and it may be necessary to twist it with a torsion forceps. In rarer instances, it is requisite to take up the artery; while generally, holding the tissue pressed firmly between the thumb and fingers for ten or fifteen minutes, will suffice to stop the flow, and by rest and cold applications it will generally be prevented from recommencing.

Sometimes, instead of any laceration, with rupture of any vessel, the parts are much bruised with *ecchymosis and extravasation into the labia majora*, which are consequently much swollen and painful. This condition is best treated by cataplasmata or cold applications over the parts; and a few days only are required, with rest and light diet, if the inflammation be sufficient to demand constitutional treatment, to effect resolution, absorption, and cure. Sometimes, however, this is not the case, and the parts go on to suppuration; an abscess forms, which, if not opened, may spread through the loose cellular tissue and become very large, and greatly destroy the parts. Occasionally, even more serious results, from the supervention of erysipelas, may be effected; and I have known an abscess to be thus formed in the labium, which, after breaking and discharging its contents, a day or two after the ulceration had spread so as to destroy the artery, which bled so profusely in spite of all the efforts of most skillful surgeons to arrest it, as quite to threaten the life of the patient; and it was not until

the abscess was completely laid open, the artery found and tied, by a long, serious, and painful operation, that the hæmorrhage was finally stopped.

The effect of coitus is very frequently seen in the *inflammation of the labio-vaginal gland*, sometimes called Hugier's gland, from its recent discoverer and pathologist. This is one of the commonest forms of acute inflammatory disease of these parts, and is caused not only by coitus, but also by the friction arising in the course of horseback riding, particularly in those unaccustomed to this exercise, and more especially when this excitation is taken during the period of the menstrual congestion. The abortive treatment by cold and astringent applications and leeches, or failing in that, by cataplasmata and the subsequent opening of the abscess, it is not necessary to enlarge upon here.

Vaginitis is also the direct result of excessive coition. This complaint does not materially differ, as I have described to you, from gonorrhœa, unless it be that the latter is more virulent. Indeed, I am very doubtful if gonorrhœa should be considered a specific disease; certainly I have seen cases of vaginitis not different in any respect from gonorrhœa after a connection of unquestionable purity; and it is generally recognized that urethritis in the male is often produced without an impure connection, being the result of uterine leucorrhœa of an acrid character. It is considered by some that the presence of urethritis complicating vaginitis is a sign of the specific character of the complaint; yet this, too, I am convinced, is incorrect, for reasons similar to those just enunciated.

Vaginitis is unquestionably the product of excessive sexual intercourse, and we find it perhaps more frequently in the wives of young, sanguine clergymen, and other men of like continent habits. Unlike the majority of the young men of cities, at least at the present day, their youth is spent in abstinence and imagination. Marriage with them is a rite which justifies the freest and fullest indulgence of their pent-up passions, and the consequence is that they are apt to go to such excess that disease is the result. Moderation in the indulgence of all the appetites is absolutely requisite to avoid disease.

So far as the treatment is concerned, antiphlogistics, rest, and mild tropical astringents, a grain or two of the nitrate of silver to an ounce of water, often repeated, into the vagina, and an unstimulating diet, is all that is requisite. For a local application I have found no injection more efficacious than the following formulæ:

℞.—Zinci Chloridi, ʒ ij.
Aquæ Puræ, ʒ iij. M.

Or, what is about the same,

℞.—(Squibb's) Liquor Zinci Chloridi.
Eight or ten drops of either to a tumbler of water.

Not unless the urethra is implicated is any medicine by the mouth necessary. If so, copaiba, cubebs, potassæ, etc., to act specifically and modify the acridity of the urine, will be found requisite.

Coitus does not, in the normal condition of the uterus, produce disease of the surface of the cervix. It, however, if very frequent, brutal, or in consequence of a too long virile organ, will produce congestion of the organ; then, from its inflamed condition, abrasion of the mucous membrane; from a consequent hyperæmia, hypertrophy, and increased weight, consequent prolapsus, and a whole train of depending symptoms. Where these symptoms exist, if acute disease continues, coitus is inconsistent with cure. When, however, we have chronic hypertrophy of the cervix, endometritis, as in the case now before us, I find that moderately frequent intercourse, entered into without an inordinate sensuality, is beneficial, and so far from being the cause of injury, acts as a direct stimulus to the parts, unloading the congested and turgid glands, and by exciting them to a more profuse secretion, tends to reduce the hyperæmia of the organ.

When, however, there is simple abrasion of the cervix, unaccompanied by hypertrophy and thickening of the parts, or even deeper ulcerative disease, which is very rare, intercourse will generally be found productive of bad results. The glandule lining the neck not participating in the disease, no benefit will accrue from their stimulation and unloading; and very frequently disease may be lighted up in them and spread either as an acute or chronic disease, with that facility of "propagation by neighborhood" so marked in uterine diseases, upon which I have already often enlarged.

Where hæmorrhage follows immediately after coition, with or without pain, there is always some disease present. It does not generally proceed from the just described ulcerations, unless they be of the *fungous variety*, regarding which you have been instructed; but it is usually an evidence of more serious disease, perhaps of a small mucous polypus, or a fibroid, either pediculated or submucous, or of a cancerous or phagædenic ulcer, to which appropriate treatment should be

directed. The hæmorrhage produced by coition from a mucous polypus not larger than a pea, is sometimes exceedingly persistent and debiliating.

Coition in those suffering from endometritis is not necessarily in all instances injurious, but it is apt to be attended by sudden and most intense spasms of pain simulating colic, which comes on not unfrequently in the course of the act. I have one case in my memory where I administered a tablespoonful of the Tinct. Opii without relief, and was obliged to give additional doses of the same narcotic before the violence of this intense spasm was assuaged. Sometimes these pains come on at other periods, especially after the sudden suppression of the menses. These occur very commonly among prostitutes, and are sometimes called *colica scortorum;* and their pathological character not being well understood, they are variously considered to be peritonitis, inflammation of the bowels, sometimes more nearly as metritis; but in almost all these cases are improperly treated by mercurials, from which I have seen many uselessly salivated. The temporary treatment is opiates and hot fomentations, and subsequently leeches, or scarification of the neck, intra-uterine applications of styptic unguents, and generally abstinence from sexual intercourse. The latter is, however, the most difficult prescription to enforce among the class in whom it is so apt to occur, already referred to.

In the pregnant, coition is often to be entirely prohibited, especially in those who have had previous abortions. I have elsewhere stated that for this falling of immature fruit there is always a cause. Often it is owing to ulceration of the os, fissures of the cervix, which are separated by the development of the womb and the absorption of the neck into its substance. Coition starts up a slight bleeding, which is speedily increased, till it becomes so augmented that an abortion is the almost inevitable result. *Obsta principiis* is the rule, and abstinence from coition and the freedom from all uterine irritation is the method of enforcing it.

So, too, in the cases of so-called "irritable uterus," or in those women "who have a tendency to abort at certain periods," but where there is always some certain and appreciable disease, be it as above mentioned, or endometritis, little polypi, spinal irritation, etc., coition is absolutely to be avoided until the usual period for abortion has been assuredly passed, and resumed only with the greatest care. In fact, excessive intercourse will of itself produce abortion, as certainly and for

the same reason as the water douche, by simple uterine irritation. This is, in my opinion, the reason why prostitutes so rarely become mothers. It has been supposed by some to be the mixing of various semen, etc.; but I believe it to be simply and solely because the uterus is not allowed the rest indispensable to form the *nidus* requisite for the ovum, but, constantly irritated, throws it off in the earliest stage. Of course a career of prostitution eventually so disorders the generative apparatus that they are rendered incapable of fulfilling their functions under any auspices.

Finally, to conclude this hasty *résumé* of the hygienic proprieties of coition, after delivery, this act should be renewed with great circumspection, and not until a proper period of time has elapsed. Not unfrequently are the sexual relations re-entered upon with a haste savoring more of bestiality than of creatures endowed with reason and sensibilities. The period cannot be determined by days, but time should elapse sufficient for the entire and complete cessation of all profluvia, for the resolution of the uterus, for the restoration of the vagina and perineum to their normal tone and contractibility; operations which will rarely be completely effected in less than a month, and which usually exceed this period. Indeed, we not unfrequently find the bloody flux continuing double this period. The poetic exaggerations of Michelet, in regard to the "internal, constant wound" with which woman suffer, is in this respect more worthy of consideration than in any other.

I have thus hastily strung together, and presented with some attempt at sequence, views which have been enunciated throughout the course. Their careful consideration will, I am sure, save you from much anxiety in your future career. They should be considered not as a prurient theme for a vicious imagination, but simply and solely as an investigation of great physiological and pathological laws. Such contemplations of any function in God's creation elevate and refine the man, while the morbid idealism by the depraved mind but degrades the thinker, and dishonors the Creator of all things.—*Am. Med. Times.*

ORIGINAL COMMUNICATIONS.

EPILEPSY CAUSED BY THE ASCARIS LUMBRICOIDES.

By M. M. EATON, M.D., of Peoria.

Having had the care of a few cases of Epilepsy in the Chicago City Hospital, under the direction of Prof. Brainard, the last of 1859 and first of 1860, my mind was called to notice the great variety of causes producing, and the multiplicity of remedies found useful in different cases.

It was, therefore, with a degree of reluctance that I undertook the treatment of S. S., who called me Aug. 25th, 1861. He was about 30 years of age, unmarried, and a native of Massachusetts.

His brother and mother stated that he had been subject to fits for nine years; that they commenced mildly, but had steadily increased; that for four years he had had them two or three times a week, often as many times a day; and had only once in that time been free from them so long as three weeks.

They said "he had been doctored by nine different *medical* men, and had used almost all the newspaper remedies for Epilepsy. He had been been a school teacher, and had studied law two years previously to his fits getting so bad; but now he was weak, and did not perform any labor."

He looked careworn and pale, and there was a vacant stare in his eye, unpleasant to look upon; was very irritable; pulse weak.

He said he wanted to eat; but that when he did so, he felt a rising like a ball in his throat, so he could swallow but little; still he felt the gnawing of hunger in his stomach, which he was never able to satisfy.

On inquiry I ascertained that he had been twice subjected to a thorough mercurial treatment; had been bled repeatedly; had used almost all the *Veg.* and *Min.* tonics, as well as a great variety of antispasmodics and antiperiodics; and, so far as I could learn, I thought these remedies had been applied with a skillful hand.

I examined the cranium, but could find no depression, although they told me that he had, when a small boy, received a severe blow from the kick of a horse on his head.

I told them I would think of his case, and requested to be called if he took another fit, that I might see him in one, and be better able to judge of his case.

The next day he was attacked, and I, happening not to be far off, was soon by his side, and after witnessing his appearance and hearing his brother's description of the onset of the attack, I was convinced that my man had the pure, unfeigned Epilepsy, the very *grand mal* of the French.

The paroxysm lasted this time near twenty minutes; he revived, seemed rational, and then fell asleep and slept over an hour. This, I was told, was his usual custom.

On inquiry I found he was troubled with itching of the nose and anus; that his bowels were often hard and painful; and that when a small lad he had been troubled with worms.

After some reflection, I called the next day, and told him and his friends that I thought he was troubled with worms, and would give him some medicine for them. Ordered—

℞—Ol Terabin,
Ol Ricmi aa f ℥ ij,
Alcohol f ℥ j,
Es Cin gtt. xxx M.

Sig.—Take a large spoonful in milk after eating, three times a day. Ordered him to take but little food.

Aug. 28th—Took the medicine as directed.

Aug. 29th—Ordered and gave Ol. Ricini. ℥ j.

Aug. 30th—Found that the previous day and evening he had had copious discharges of worms, and on examination I

found them to be of the variety called the Ascaris Lumbricoides; the dejections being in amount about one quart, mostly composed of worms, nearly all of which were dead.

Ordered him to take the same medicine as on the 28th; followed the next morning by castor oil.

Sept. 1st—Found he had had a slight fit the day before, and since I saw him had been relieved of over a quart of offensive matter *per anum*, looking like a jelly of worms.

He was then very weak, and affected with strangury. I introduced the catheter and relieved him of that, and ordered him to take ℥ ss of the castor oil. Saw him at 2 P. M.; found his dejections contained but slight traces of worms; ordered beef tea to be given, and teaspoonful of the following solution in water every four hours:

℞—Quinia Sulph. gr. x,
Morph. Sulph. gr. ss,
Alcohol ℥ iv,
Es. Wint. gtt. l x M.

Continued this a week and then gave the Tr. Ferri. Muriat gtt. x three times a day for a week longer. Then gave him the following pills to take three Mondays and Wednesdays for 4 or 5 weeks:

Qui. Sulph., gr. xx.
Strychnia, gr. ss.
Ferri Carb., gr. xxx. M. Ft. Pill No. xxx.

Oct. 1st—Saw my patient and learned he had followed my directions, and had had no more fits; that the itching of the nose and anus was gone and that his food went to the right place now and satisfied his hunger; there was no more of that rising in his throat he had complained of before.

Feb. 10th, 1861—When in Chicago, at Rush College, I received a letter from a friend of his, stating he had been afflicted with no more fits, but was then and had been teaching a writing school with good success.

In June last, I learned he was well and had gone to Woodford Co. to work on a farm.

A COUCH FOR A PATIENT WITH A FRACTURED FEMUR.

By ELMER NICHOLS, Medical Student.

As mobility is said to be the most frequent cause of ununited fractures, and having been so unfortunate as to have a fractured femur myself, and knowing the great difficulty in keeping a patient sufficiently quiet with one, I have been induced to contribute my mite to the vast amount that has been written on this subject by giving a description of a couch I invented for the use of patients with a fracture of this kind. It is with a feeling of great responsibility I approach a subject that has engaged the minds of so many eminent surgeons, and one which good teachers treat so carefully, and one, also, which surgeons in general understand none too well, as the deformed limbs we so often meet clearly indicate.

I hope no person will suppose I am so self-elated as to imagine for one moment that I am able to obviate all the difficulties that arise in the treatment of fractured femurs; far from it. If I am able, to some extent, to overcome any one obstacle, I shall feel well compensated for the time I have devoted to the subject. Whether I do this or not depends on the faithfulness in the trial of the following described apparatus:

Make a common lounge frame, as follows: Take two pieces of scantling, the diameters being three and two inches, and six or more feet in length. These unite by *four* cross-pieces of the same diameters and two and a half feet in length. Two of these are placed near the ends, while the other two are placed near the middle of the frame, so that when a person is lying on the lounge the nates will rest over one, while the other will be under the upper portion of the thighs, being about six inches from each other. These cross-pieces, groove on their inner and upper edges for the purpose of holding the

boards that form the bottom of the couch. The peculiar position of these slats or boards is this: the ones on which the lower extremities rest are to be even with the top of the frame, extending from the cross-piece at the foot to the next one in the middle, while the others extend from the other middle cross-piece to the one at the head, being situated some lower than the edge of the frame, so as to leave room for a mattrass, and should have a joint near the middle, by which the head and shoulders may be raised or lowered to suit the patient. These need two supports under the middle of these boards—the one at the foot to keep the boards from sagging and producing a curve in the fractured bone, and the one at the head to support the hinge-joint. There are two light cross pieces mortised into the longitudinal pieces. Between the two middle cross-pieces are placed two short pieces of boards, filling up the space between them, except an aperture on the medium line through which are passed the fœces. Suspended beneath this is a board on which is placed a vessel at the time the bowels are evacuated.

A firm mattrass is placed over the upper portion of this frame, and secured throughout to the boards by means of strings passing through it. This mattrass must be firm and unyielding, giving way only enough to fill up unevenness of the body, and when completely depressed be on a level with the top of the frame and boards on which the fractured limb rests. There should be an excavation in the cross-piece on which the nates rest, and this should be well padded by the mattrass, so as not to press too hard on them. The whole couch, except the orifice through which the fœces pass, is covered with a quilt and sheet, or anything similar to keep the patient warm, and thick enough to be somewhat soft; but not depressable to any great extent.

The longitudinal pieces may extend beyond the frame at each end and be converted into handles, making a sort of hand-barrow on which the patient may be moved. Thus when a patient receives the injury away from home, as is

often the case, he can easily be placed on the couch, taken into a sled or large wagon, and by two persons, one at the head and the other at the feet, steadying it in their hands over rough roads, he may be conveyed home, even a long distance, though it may be, without material injury. When where the patient wishes to remain, the frame can rest on two wooden horses or benches.

The Treatment with this Apparatus.—This will be as I should treat it myself without reference to any particular rules laid down in books on fractured femurs, though I believe it is not contrary to the general plan.

Having placed the patient on the couch, you put a long, straight splint beneath the limb, padding it sufficiently to fill up inequalities of the limb.

Having placed the fractured ends of bone in apposition, you apply the eighteen-tailed bandage. On the outer side of the limb place the long splint, extending from the hip to below the foot, and on the rest of the thigh apply short, thin, but firm splints, extending from the groin to the knee-joint. These are held in position by single, strong bands, tied snugly around the whole. Padding, of course, is put beneath the splints so as to obtain pressure as the thigh requires. Now, if the fracture is oblique it is necessary to apply extension to keep the limb in proper length. This may be accomplished in two ways: First, by the usual means, with the long splint, with a shoe adjusted by means of a screw to draw it out or let it back as you wish, while the upper end of the splint is held in place by means of the spiral band, filled with lint or cotton, passing round the groin and through the holes in the splint. This, probably, is as good as any. There is but one objection, and that is the shoe, or the mode in which the straps are often applied, produces excoriation if you use the desired force for extension. This, however, can be obviated by using a legging instead of a shoe, which is to pass up over the calf of the leg. This is to be tightly wound with a bandage, and then saturated with rosin dissolved in alcohol.

The legging and bandage should be previously rubbed with powdered rosin. But better than this, perhaps, is the use of long, wide straps of adhesive plaster, extending all the way up the leg and over the knee-joint.

The other mode is perhaps the most readily procured, especially on the couch. The spiral band passes around the groin and extends up opposite the waist, is made fast to the side of the couch. A shoe, with legging or two straps extending up the leg, (as described above,) with two eyes in the sole of it, through which passes two cords back to a hook or peg in the foot-piece. The object of the *two* eyes (one near the head and the other near the toe) is to keep the foot at right angles with the leg. The cords running back from these eyes are tied as snugly as possible to the hook or peg in the foot-piece, and now, by placing a stick between the cords and twisting all necessary extension will be obtained. To prevent the foot from turning from side to side, a cord is tied round the toe of the shoe and fastened to each side of the couch.

To prevent the patient moving his hips, and thus tending to move the fractured bone, a broad belt passes over them and is buckled on each side to straps tacked on the frame. Care should be had not to press the pelvic viscera with the belt.

What I Claim in This as Superior to Other Dressings.—I understand they have beds constructed in large hospitals for patients with fractured limbs, having a trap-door through which the fæces can pass. If the bed is hard and firm, I conceive this to be as good, and perhaps better, than the couch above described; but it is not available to the common practicing surgeon, while the couch may be constructed after the fracture has been dressed, and then the patient placed apon it as easily as he could be raised for the purpose of evacuating the bowels; and it will *pay* to have it prepared for *only one* case of fractured femur, *i. e.*, if a *good limb* is better than a poor, crooked excuse for one.

There have been many means devised for raising the patient

from the bed, when necessary, by means of rollers, levers, &c. But I dislike the idea of moving the patient at all, let him be ever so careful to obey every injunction of the surgeon, and besides have the most careful attendants, (which, be assured, you will hardly ever find,) there will be continually occurring sundry jars and twistings that will cause more or less gliding of the fractured ends on each other, thus retarding union. The bed on which the patient must of a necessity be placed is usually yielding, allowing of depression, thus allowing the patient to glide about, moving the limb, and thus requiring an excessively tight dressing to prevent curvature to a *great extent.* On the couch the patient has for his limb and body a plane, unyielding surface, and is kept in *one place all the time*, so that it requires but a very little pressure in the dressing to keep the fractured ends of bone in perfect apposition; and this I deem to be an important point to be gained, as I believe a bone would unite quicker if the circulation was not impeded at all by any dressing, if the limb could be kept *perfectly quiet.*

Since I commenced this article I have been shown a sort of barrow, made by tacking a piece of canvass to a wooden frame, on which the patient lies, and is raised on and off the bed when necessary. This has the objections, first, of the sagging of the canvass, causing movement and curvature; second, *moving the patient;* and third, requiring two attendants, who are liable to have accidents occur, even if they are the most careful. In mine, one attendant is all that is required at any time after the limb is once dressed.

The arrangement for raising the patient's head and shoulders is one to be desired, as it is one the patient will wish for, and wishing, *will have it*, spite of all injunctions to the contrary. If there is no means provided he will resort to pillows, chairs, &c., which will cause more or less jarring and movement of the body, and through that the same to the fractured bone, in placing them in position.

Now, when we look at the great number of suits brought

against surgeons for maltreatment of this fracture, I feel sure that this article will not simply be glanced at unheeded; but that the apparatus herein described will be thoroughly tested, and its merits (if it has any) be made known, as there is no patent on it and is free to all who will accept it. When you have a case of fractured femur, and are puzzled to know what to do, refer your mind to the couch prepared by one who has had this unfortunate fracture himself.

PODOPHYLLINE.—I have been in almost daily practice of using it for several years, and have made up my mind respecting its potent qualities. It undoubtedly does act as a stimulant to the liver, which, under its influence, pours out bile profusely. This action is not temporary, but is persistent for several days after its administration. It is, therefore, an admirable adjuvant to other cathartics which are apt to be followed by constipation, requiring a subsequent laxative to again move the bowels three or four days after their exhibition. Given alone, it is apt to gripe, and it should therefore be administered with some laxative, as jalap, or rhubarb and some carminative. Care should be taken in its administration to children, for I have known it to be so excessive in its action as to produce something approaching collapse. Another peculiarity in its action is, that it is very persistent, continuing to operate for several days upon the intestinal canal; being in this respect the opposite of most medicines, which are apt to be followed by a greater or less constipation proportionate to the catharsis.—*Prof. Gardner.*

EDITORIAL.

"*Put not your trust in*" *Local Editors.*—A medical contemporary is exceedingly exercised because, in a recent number, we quoted certain paragraphs from the columns of a prominent daily newspaper published in this city. We confess the soft impeachment and admit we credited its statements, largely because the acting editor of our medical contemporary is immediately identified with said daily newspaper, and therefore its utterances, in strict accordance with the "code," ought to be received as true.

We rejoice with our amiable contemporary in ascertaining that our public schools are not to be curtailed, or in anywise suffer in consequence of the delinquencies of its patron saint, for it appears said patron saint, fortunately, had nothing to do with the school moneys. It sufficiently appears that the individual from whom they derive the patronymic of their pet institution, only had to do with the *Sewerage* fund, and incidentally with the model medical college baptized with the promises he so liberally issued.

It leaks out that the model great medical reform school was endowed with a three year's lease of the cockloft of a warehouse and hide and skin depot, provided the Faculty would put it in repair and good order, and were moreover incited to the work of medical reform by the express or implied assurance that their patron saint would erect them a new building wherein to inculcate medical reform, at the expiration of the three years' life and good behaviour, always provided it could be done with safety to the public funds, and without injury to the private resources of the patron saint.

There seems to be some strange contradiction in all this business. Our contemporary is Lind, and not Lind, according as the wind blows Northerly or Southerly. As secular editor,

our contemporary attacks Mr. Lind; as medical editor, he defends Mr. Lind.

As secular editor, he insists that the patron saint has curtailed the fair proportions of the public schools; as medical editor, he resents the imputation with exceeding wrath. We are in doubt, therefore, and we anxiously inquire, is there any such thing as the Lind University, with academical and theological, and (grand climacteric) medical department, — "or any other man?"

Which way looks our contemporary? One of its editors abhors all that is fermented or distilled, and lifts up his voice in the highways and byways against it—the other is accounted such an acute judge of the virtues thereof, that the State Agricultural Society appoints him one of its judges of the excellence of ales, and silver pitchers incline to Sands, or Lill, or Dickinson, according to his refined taste. We despair of ascertaining the position.

But one thing has emerged from this contest—the Lind Medical College has no endowment, save promises now known to be impossible of fruition. Its assumed reformed methods of instruction have been repudiated by the whole body of the profession. It simply aims to build up a new school by misrepresentation of its own resources, and incessant calumny of the old. We leave it with its patron saint in the courts—the one to general medical opinion, the other the provided tribunals of justice under the Constitution and Statute Laws. We shall soon find which is the true Dromio.

Books and Pamphlets Received.—From Blanchard & Lea, through W. B. Keen, 148 Lake street, Chicago:

Bumstead on Venereal,

Barwell on Diseases of the Joints,

Morland on Uræmia.

Timely and valuable treatises, which will respectively receive early attention.

Transactions of the State Medical Society of Indiana; p. p. 56.

Pott's Disease; or Angular Curvature of the Spine. Cases successfully treated. By. J. A. Wood, M. D., Boston, Mass. Dr. Wood reports several cases of cure of this serious affection, "effected with the curvature nearly, if not completely removed, by appropriate mechanical appliances principally, to the entire exclusion of setons, issues, or any other counter irritant, or even restricting the patient to the recumbent position. Without expressing any opinion further, we may observe that Dr. W. refers, by permission, to several of the most prominent surgeons in Boston and New York city, and can be consulted at his office, 31 Cooper Institute, N. Y. city. The apparatus employed has been described in one or more of the medical journals.

Military Map and Gazetteer.—Our military surgeons, as well as civilians, will find "Lloyd's Military Map and Gazetteer of the Southern Country" very convenient for a reference during the progress of the Grand Army toward the Gulf of Mexico. We acknowledge the receipt per mail of a specimen copy, upon which we hope to trace the daily progress of our brethren in the brigade and regimental service.

Professional Patriotism.—A private letter from one of the number, informs us that there are between 200 and 300 applicants for the position of Surgeon to the Tenth Regiment of Michigan Volunteers. Is there any other profession which can show proportionate zeal for serving the country? It is fervently hoped that all may not be forced to go.

Rush Medical College.—As noted in the last number of the JOURNAL, there will be no interruption in the regular course of lectures the ensuing session, in consequence of the appointment of Profs. Blaney and Freer as Brigade Surgeons. These gentlemen will give complete courses as usual.

Prof. Blaney, having been selected as Medical Purveyor to the Illinois forces and Supervisor of the General Hospital

department, is permanently stationed in this city. A letter from Prof. Freer, now in Washington, positively assures us that he will return and give his course, unabridged in any part.

The position of Demonstrator of Anatomy will, during the temporary absence of Dr. Powell, be supplied by the Prof. of Anatomy, assisted by I. P. Lynn, M. D., a well known and highly esteemed almunus of the College resident in this city.

The only modification of the usual curriculum will be the devotion of appropriate attention to Military Surgery and Practice, as rendered imperative by the exigencies of the times. It will be seen that, for carrying out this object, the College presents very considerable facilities; perhaps it is warrantable to assume, unequalled elsewhere.

Oxide of Zinc.—Dr. S. Waterman, in the *Medical Times*, asserts that Oxide of Zinc exerts a powerful sedative or soothing influence over the brain and the ganglionic nerves. It is mild in operation and free from the after effect of opium and other narcotics. It may thus be used in cases where other narcotics are contraindicated. "Its ability to soothe vascular excitement dependent on cerebral and nervous irritation cannot well be doubted; whilst it possesses equal power to allay and calm the irritation of the brain and ganglionic nerves, unaccompanied by inflammatory action of those tissues." He considers it even sometimes useful to a limited extent in inflammation of the brain and meninges. He concludes that both rationally and by actual trial and observation, it is beneficial in *delirium tremens*, when narcotics fail; given in two or three gr. doses every two hours, alone or in combination, as indicated. In *eclampsia infantilis*, after the fits have been broken by free use of chloroform; given in grain doses alone, or with cal. digit, or squill, &c. In *eclampsia*, happening during pregnancy, labor or menstrual irregularities; given in two or three gr. doses, every two hours. It is not as efficient in plethoric cases or uræmic intoxication. In *hysteric convul-*

sions. In *exanthematic diseases*, where the eruption accompanied by cerebral irritation or even convulsions. In *epilepsy* and *chorea.* In *asthmatic difficulties* and *whooping cough.* In the *night sweats* of phthisis. In *worms* and *chronic dysentery*, and lastly in some of the more obstinate cases of *intermittent.*

Dr. W. calls for further investigations of its properties.

Gargle in Diphtheria.—Common salt is strongly recommended as a gargle in diphtheria.

Pitting in Small Pox.—Dr. Bell commends the wearing upon the face of masses of cotton wool saturated with *Linimentum Aquæ Calcis*, the whole covered with a handkerchief, leaving apertures for the eyes, nose and mouth. The dressing should be kept sedulously applied from the commencement of the eruption until convalescence is fully established.

Antaphrodisiac.—Bromide of Potassium is again coming into favor as an antaphrodisiac. Pfeiffer, of Paris, confirms the opinion that it is a sedative both to the muscular and secreting portions of the generative apparatus. It appears to control both erections and discharges, and relieves neuralgia of the neck of the bladder and testicle. It is exhibited in moderate but repeated doses, every three or six hours.

Rupture of the Abdominal Parietes.—Edward Batwell, M. D., of Detroit, reports a case wherein the patient, a woman of 67, of rather intemperate habits, whilst sitting in her chair during a violent fit of coughing, had a complete rupture of the abdominal parietes "not alone through the muscular fibre of the recti muscles and linea alba, *but through the integument itself*, permitting a large quantity of omentum and small intestines to escape from their natural cavity, which were, with considerable difficulty, returned, owing to the strong muscular contraction and to the expression of pain from the patient."

"The rupture had occurred about an inch and a-half below the umbilicus, was about four inches long externally and about two inches in extent through the peritoneum. The recti muscles were severed through their entire breadth, and there was no appearance of ulceration or previous abrasion of surface, to account for the accident." The patient lived twenty-five days after receipt of the injury, the wound showing little or no tendency to unite. The case is certainly unique, but its credibility is most unquestionable.

Chloroform in Tetanus.—A correspondent (Dr. Wagenseller) of "Reporter," chronicling a case of idiopathic tetanus, unsuccessfully treated by chloroform, nevertheless concludes:

"1st. Chloroform does not always depress an already enfeebled circulation; although in this patient it acted the part of a powerful *nervous sedative*, it fulfilled at the same time the part of an *arterial stimulant*. This effect was *invariable;* these two important indications were met by it at every occasion of its administration.

"2d. Chloroform fully and freely administered will relax partially and temporarily the most persistent tetanic spasm, when opium and other remedies (which were tried in large doses) will produce no effect whatever."

He confidently looks to more recoveries from the use of this agent, than from any other now in use with the profession.

Nervous System.—In a recent lecture on the Spinal Cord, Bernard urges that the functions of the sympathetic nerve and cerebro spinal system so long viewed as entirely different in their nature—organic life being the sphere of activity of the first and animal life of the second—are by no means separable by absolute distinction. That the terms "sympathetic nerve" and "cerebro-spinal system" ought, with many others of like nature, to be expunged. There is no essential physiological distinction. The ganglia are not independent sources of nervous action. The results of experiments all

tend to prove that all the branches of the sympathetic are derived from various regions of the spinal cord. The difference in the mode of action and conduct of the several nerves is not sufficient to establish a real diversity of nature.

He concludes: "The nervous system, therefore, contains only two great divisions—sensitive and motor nerves; it matters little whether the subject is conscious of their action or not, their properties in both cases being identically the same."

We have not space for further details from this interesting paper, (translated by Dr. L. Elsberg,) but must express gratification that this acute observer is gradually receiving the idea of the beautiful simplicity of the mechanism of nervous action. One step further is demanded, viz: the nervous system contains *no* divisions. The conduct of a nervous fibre, either as a sensitory or motory, depends *not on the fibre itself, but upon the structure which it reaches at its extremity.* Nerve fibre, wherever it is distributed, is simply a conductor determining changes at one extremity which have been originated, in its course, or, at the other extremity. The ultimate effect may be sensory, motory, &c., or, in one word which includes all *secretory*, according to the structure of the tissue or organ reached. The essential effect is a modification of the nutrition of the part reached, and hence necessarily a modification of its functional actions.

Didn't See the Point.—Some wit, chagrined at the failure of the distinguished authoress, Mrs. Ellis, to comprehend what he supposed to be a good perpetration, indignantly exclaimed that she could not see a joke if it was fired out of a cannon. What was his dismay when she with great astonishment inquired, "How *could* a joke be fired out of a cannon?"

Something like this occurred at Washington the other day, when the qualifications of a candidate for Brigade Surgeon were being looked over. A venerable member of the Board asked whether the candidate had *operated* much. Certainly, was the grave response,—he has operated extensively—*in real*

estate. The venerable examiner, with a puzzled air, remarked that he could not see *the analogy.* The candidate, however, was duly commissioned.

Renunciation of Homœopathy.—Dr. J. C. Peters, of N. Y. city, whilom distinguished as an author, editor and practitioner of the homœopathic school, is out in the *Am. Med. Times* with a letter renouncing and denouncing that system of delusion and imposture. We understand that several other prominent homœopathists of that city have followed his example. This is honest and honorable. But up here in the Northwest things are done differently. After very close observation and frequent conversation with homœopathists, we have been unable to find one who adheres to his assumed system. We have detected, time and again, their use of the usual doses and methods of regular practitioners. Many of them, indeed, make a merit of their readiness in "severe cases" to have recourse to "old school measures." The gross inconsistency, not to say dishonesty, of this course is apparent. But what is the use of arguing the matter? A certain proportion of the populace will have a pet delusion or imposture of some sort, and, perhaps, in its way, this absurdity of homœopathy is as harmless to them as any.

Corps of Medical Cadets.—We have received several letters of inquiry as to the proposed Corps of Medical Cadets. As we possess no particular information upon the subject beyond what is contained in the following circular from the Surgeon-General U. S. A., we insert it in full:

"SURGEON-GENERAL'S OFFICE, August 6, 1861.

"The following Act of Congress in relation to the Corps of Medical Cadets is published for the information of all concerned:

"'SEC. 7. *And be it further enacted,* That there be added to the Medical Staff of the Army a Corps of Medical Cadets, whose duty it shall be to act as dressers in the general hospitals and as ambulance attendants in the field, under the direc-

tion and control of the medical officers alone. They shall have the same rank and pay as the military Cadets at West Point. Their number shall be regulated by the exigencies of service, at no time to exceed fifty. It shall be composed of young men of liberal education, students of medicine, between the ages of eighteen and twenty-three, who have been reading medicine for two years and have attended at least one course of lectures in a medical college. They shall enlist for one year, and be subject to the rules and articles of war. On the fifteenth day of the last month of their service, the near approach of their discharge shall be reported to the Surgeon-General, in order, if desired, that they may be relieved by another detail of applicants.'

"Application must be made to the Surgeon-General for admission into the corps, in conformity with the above act, stating the date and place of birth, place of residence, period of medical studies, and enclosing the certificate of the dean of the college (or, when not attainable, other satisfactory evidence of the fact), that the applicant had attended one full course in a medical college. Those applications must also be accompanied with testimonials of the good moral character and sound physical condition of the candidate.

"When an applicant is favorably considered, the candidate will receive a letter authorizing him to appear before an Army Board of Medical Examiners, who will make a special report in such case. From among those approved by the Board the Surgeon-General will select such a number as the service may require.

"As the services of this class of medical and surgical assistants are at once required, applications (to be successful) should be promptly made to the Surgeon-General, who will direct the candidate to appear before one of the Army Medical Boards now in session in Washington and the city of New York.

"R. C. Wood, Acting Surg.-Gen."

Perils of the Service to the Medical Staff.—Whilst upon the field, Surgeons, like other non-combatants, are exposed to the chances of an occasional stray bullet, shot or shell. In the heat of conflict, but especially during a rout, they are in more or less danger from the ignorant brutality of a pursuing soldiery; but this latter is a rare and exceptional case. The highly wrought stories of Confederate butcheries of surgeons

and wounded soldiers, repeated after the Bull Run affair, have, we are happy to believe, been almost wholly disproved.

Dr. Alfred Powell, Surgeon of the Second New York Regiment, was unquestionably killed while engaged in succor of the wounded, but there appears no evidence that his professional character was known, or that the catastrophe was more than one of the incidental brutalities of even the best conducted *christian* and *humane* wars. The surgeons who were taken prisoners generally concur in the statement of the kind treatment of the enemy, towards themselves, as well as the wounded under their care. The principal trouble seems to be the danger that, in the absence of the usual system of exchange of military prisoners, they are in danger of being retained in the enemy's custody, or placed on a parole, which will debar them for further profiting by their successful trial before the Examining Board.

But if surgeons, as in some instances reported, so far forgot their non-combatant character as to seize sword or musket and act the fighting part, of course they must take the soldier's chances. So even the wounded, if, through motives of either revenge or patriotism, they still continue, as in many cases related, to load and fire upon the enemy, they must not expect the ordinary immunity of the disabled soldier, but to render themselves liable to bayonet or ball. For the honor of the Anglo-Saxon race, we shall continue to believe that the killing of surgeons or wounded men, thus far reported, has at least this palliation. Meanwhile we shall continue to believe that the position of Surgeon to a Regiment, even if not particularly lucrative, or especially prolific of honor or reputation, at all events is not so remarkably dangerous as to frighten from it men of ordinary strength of nerve.

The Rank.—The vexed question is apparently settled by official information from the Adjutant General's office. The Regimental Surgeon of the Volunteer force, ranks and draws pay as a Major of Cavalry; the Assistant, as Captain of

Cavalry. This is better than feared; but now let the Government vouchsafe, brevets, promotion and the usual honorary mention of those who distinguish themselves in this service, and the Surgeons of the Grand Army will have little of which to complain. The importance of the department demands at least this.

Iron Pyrites.—Some correspondent, whose letter unfortunately has been mislaid, encloses a fragment of iron pyrites which a hopeful friend has handed him. Gold occurs in connection with this pyrites in gold bearing regions, but not elsewhere. Tons of this pyrites are worthless. The gold, if present at all, is in homœopathic attenuation, anything but pleasant to the miner, however much a similar attenuation may titillate the palate of the devout believer in infinitesimals. Homœopathy is Small in this city, but in value about equivalent to the gold in our friend's pyrites.

A few Words about Typhoid Fever.—All the phenomena of Typhoid fever tend to convince us that it is essentially dependent upon a *materies morbi* in the blood. The results of treatment illustrate it, and we take for granted that it is as well established as possible without its being absolutely sequestered and demonstrated by the chemist.

A large amount of this *materies* unattended by efforts at elimination, involves the phenomena of Cerebral Typhus. A large amount and excessive effort at elimination induces the graver forms of Typhoid (Abdominal Typhus); a lesser amount and active excretion presents the more common mild forms.

It is quite unfortunate that under the general term, "inflammation," are grouped a great variety of very different conditions. The term, in fact, is as indefinite as that of "fever." The intestinal affection in this disease is too frequently considered and treated as an inflammation, whereas it is no more nearly allied to common inflammation, than the

small pox pustule and its surroundings are to the *tumor*, *rubor*, *calor* and *dolor* succeeding a healthy wound.

We are invited in practice to imitate the mode adopted by the *vis medicatrix naturæ* in endeavoring to eradicate disease. A better plan is to watch the tendency to death, and provide against it by such measures as scientific experience may suggest.

The tendency to death in the greatest portion of cases which have fallen under our notice has been by ulceration, hæmorrhage or perforation in the ileo-cœcal region. In every case examined, *post mortem*, the Peyer's patches have been involved, as sufficiently described in the books.

None have recovered after perforation—three cases. Three-fourths have recovered after hæmorrhage—eight cases. With these exceptions the disease has proved very amenable to treatment, and the results satisfactory.

We must be permitted to say that the so-called complications, gastritis, pneumonitis, meningitis, &c., have been infrequent under our observation, though frequently our professional friends have insisted that certain symptoms proved their existence. If these various organs were inflamed, the inflammation was of such a character as to merit quite a different name and treatment. In our view, too much ammunition has been wasted on "complications," especially by the book-writers. They might as well devote their batteries to the gouty toe, and neglect the gouty carcase.

Nothing is more true than the statement that in Typhoid fever, while there is life the case is not hopeless; and while there is any disease, there is danger. In the first case of perforation of the bowel in our practice, the patient had so far convalesced as to be up and about, and there was absolutely no external or rational indication of remaining disease; and yet, while at stool, the pains of perforation came on and he sunk, and was dead in six hours. On the other hand, we have had patients apparently moribund recover, in very spite of the prognosis.

The diagnosis is easier made than given. We rely upon the group of symptoms in the outset, and the roseolar eruption later as pathognomonic.

I. Languor, lassitude, mental hebetude, diarrhœa, epistaxis, continued fever, slight bronchial cough.

II. Roseolar Eruption—*always* present if carefully looked for, tympanites, sudamina, deafness, dryness and redness of the tongue, gurgling in the ileo-cœcal region (often with tenderness) upon pressure, (French method), nervous symptoms, delirium, subsultus, &c.

III. Gradual convalescence. Or, deepening of previous symptoms to constant delirium, coma, involuntary discharges, retention of the urine, prostration, &c., &c.

Average duration of treatment, nineteen days. A few cases will spin out to four, or even six weeks.

Treatment.—No emetics. No blood-letting. No active cathartics, except in the cerebral form with torpid bowels—*rare.*

First importance—quiet sleep at night. For this purpose a single full dose of Pulv. Ipecac. Comp. is preferred. The cases are very few when a large dose of this will not secure sleep, provided the patient does not fancy he has an idiosyncrasy with reference to opiates. (*Mem.*—The less a patient thinks he knows about medicine, the more likely he is to be benefited.) Rarely some other narcotic may prove useful.

Second point—that the bowels move once a day, and no oftener. To check the diarrhœa, Pulv. Opii and Acet. Plumbi in moderate doses, p. r. n. To move the bowels, Ol. Ricini vel Olivæ with twenty or thirty drops of Sp. Terebinth. Practically, in this disease, all saline cathartics are objectionable.

Third item—control febrile action by external sponging, cool air, free ventilation, cooling diuretics and diaphoretics. The diuretics are particularly preferred. Especially Acetas Potassæ: 1st, because it is practically useful by experience; 2d, because it eliminates a larger amount of solid matter

through the urine than any other known article. For instance this:

R. Acet. Potassæ dr. ij—oz. ss.: Sp. Nitri. Dul. oz. ss.:
Pot. Tart. Antim. gr. ij.: Aq. oz. iij. ss.
M. Two teaspoonfulls every three hours.

If it inclines to purge, add Tr. Opi. Camph. q. s. or Tr. Opi. The hobby of the hour, Tr. Verat. Virid., may be substituted for the Pot. Tart. Antim., either in or out of the mixture, for its known effects. In our opinion, it controls symptoms well, but shortens no disease. It is hence infinitely inferior to the Antimonial. It is more liable to leave a red tongue and augmented intestinal disorder. It is neither restorative nor depurative, except in dangerous doses. In perhaps the majority of instances we rely upon the simple solution of the Acet. Potassæ, without adjuvants. Later in the disease Liq. Ammon Acet. is substituted occasionally. In this connection, we beg leave especially to recommend free and constant use of the Acet. Potassæ. No other diuretic or diaphoretic has anything like its power as a febrifuge and eliminating agent in continued fever. We cannot but believe, from long and close observation of its effects, that it relieves the system of that material which, in tending to excretion by the ileocœcal region, so prominently deranges and destroys the glands and other structures of that part.

It lessens thirst and thus obviates the necessity so often felt of deluging the stomach and bowels with diluents, eminently nastly decoctions and shadowy soups. Hence diarrhœa lessens, and tympanites with the accompanying train of nervous symptoms abates. There will be less need of Valerian, and Assafœtida, with its after effect of horrible odors.

Fourth proposition—When the red tongue, especially if dry and shining, appears, our experience adds nothing to the instructions of Prof. Wood as to the employment of the Ol. Terebinth, except a most cordial and hearty endorsement. It is *the* treatment—and the *ne plus ultra* of satisfactory treatment. In a very few cases, it would not be

borne, and these cases have responded readily to moderate doses of mercurials—not carried to salivation. With this latter exception, we have found no use for mercurials in typhoid fever.

Fifth—As "a looker-on in Vernon" we have seen alcoholic stimulants used freely in the Typhoid fever, but must enter protest against them as a mode applicable to rustic constitutions. The cachectic crew that throng the fever wards of metropolitan hospitals furnish no standard by which country practice is to be guided—especially as the results here would speedily drive the practitioner from his "field of labor." Let it be remembered, the object of administration of the preparations of the alcohol is to arouse and invigorate the digestive and assimilative processes—not to relieve the abnormal feelings of weakness, or muscular and mental hebetude.

In the vast proportion of cases they are unnecessary and as hurtful as they are to the healthy man. Their abstraction, when once commenced with, produces proportionately the same effects as upon the habitual tippler. Considering the terrible consequences attendant upon the use of alcohol, it is the duty of medical men to avoid its prescription except in cases clearly and distinctly demanding it. It is of comparatively trivial value in the disorders now under consideration, and liable to the production of serious mischief. It will allay the nervous symptoms, it is true, but is not unlikely to aggravate the intestinal ulceration. At the very best, it is noticeable that those who rely upon it, have very sick patients and a multiplicity of "complications."

Patients rarely die of simple debility; the reason of death is deeper, and we have no evidence, theoretical or practical, that alcohol searches it out. A much more useful stimulant is furnished in Carbonate of Ammonia. Aristol. Serpent. is also very frequently quite serviceable. The stimulus they afford is more akin to the natural forces, and beyond this they do not gorge the blood with carbon. But in the—

Sixth note—Appropriate diet is beyond all other means the

real sustaining power. Concentrated nutriment is easier digested than attenuated dilutions. Dish-water slops will rumble along the canal and so outward, in one perpetual flood. Nourishment should be communicated so as not to require mastication, but should be retained in the mouth long enough to become fully insalivated. This simple thing alone will moisten many dry tongues. While there is much activity of febrile action, it is better to eat nothing; then farinaceous boluses, (not slops); then strong essence of beef, (not "beef tea"); then hashed beef; then such meat as the appetite craves and the teeth are willing to thoroughly masticate, commingled with bread, &c., up to ordinary diet.

There is no objection to some condiments, as black pepper and salt. A table-spoonful of essence of beef has more supporting power than the same quantity of brandy; but dilute it with slops, and it *will* go with the "chocolate."

When the blood begins to show signs of impoverishment, not only must nitrogenized animal food be freely administered, but there will be a saving of alcohol and vital power by mingling a generous proportion of animal fat. It is fearful to think of the number who have died of inanition, whilst some old crone, or old crone's adviser, has been assiduously skimming off the scattered globules of oil from the boiled shadows of the valetudinary *soupe maigre*. Sick diet! *Lucus a non lucendo!*

Seventh particular—The drinks should never go beyond what will be speedily absorbed from the mouth, throat and stomach. The patient will rarely suffer from thirst if treated freely with the salt above indicated.

Eighth; last, but not least—Free ventilation is all important. Poor people recover in the country better than rich ones; because the healthful air and salutiferous light are not excluded. No place outside of a hospital (the charnel house of typhoid fever) is worse for the patients than the close, heavily curtained, heavily carpeted, and cumbrously furnished rooms of the affluent. No patients are so subject to pulmo-

nary complications as those who are carefully guarded from "taking cold." A feather bed is herein an abomination. The entire paraphernalia of the couch should be changed daily. One day for service and one day out of doors. The evacuations are pestilential—out of doors with them *instanter*. The emanations are pestiferous—dilute them with outer air and sunlight. Have nothing in the room more than twenty-four hours in succession which is capable of absorbing effluvia.

Do not keep out the blessed sunlight or pure air. Put on a cheerful visage, even if playing Sir Oracle. The awakening and sustaining pleasant emotions in the patient's mind, is worth more than a gallon of "Huxham."

A Practical Treatise on Military Surgery.—By Frank H. Hamilton, M. D., New York. Baillière Brothers, 1861, pp. 234, 8vo.

This is the third work on military surgery whose appearance we have had occasion to chronicle since the commencement of the present war.*

Although this work of Prof. Hamilton takes a wider range than the others, being a "treatise," while those of Drs. Tripler and Blackman, and that of Dr. Gross, have only the modest title of hand-book, yet they all embrace essentially the same field and aim to supply the want supposed to be felt by surgeons called suddenly from civil practice to the duties of the field or military hospital. As such, they are all calculated to be useful. None of them assume to discuss the doubtful questions of surgical practice from an original point of view or in the light of any new facts.

It is indeed obvious that we most look to the end rather than to the beginning of any war for those works which can add something of value to our surgical knowledge, and, therefore, we have not heretofore, nor do we propose now to enter into any discussion of doubtful questions. The present work of

* For notice of the works of Drs. Tripler and Blackman, and that of Dr. Gross see page 308 of JOURNAL.

Prof. Hamilton embraces many subjects of interest as may be gathered from the table of "contents" subjoined:

Chap. I—Introduction; II—Examination of Recruits; III—General Hygiene of Troops; IV—Bivouac, Accommodation of Troops in Tents, Barracks, Billets, Huts, etc.; V—Hospitals; VI—Preparations for the Field; VII—Hygienic Management of Troops upon the March; VIII—Conveyance of Sick and Wounded Soldiers; IX—Gunshot Wounds; X—Amputations; XI—On the Employment of Anæsthetics in Amputations and other Surgical Operations, after Gunshot Injuries; XII—Hospital Gangrene; XIII—Dysentery; XIV—Scorbutus, or Scurvy; Appendix.

Of all these, we only feel called upon to caution all surgeons against accepting without reserve the views enunciated in regard to the use of anæsthetics, which the author regards as injurious in operations for severe wounds, and quotes Drs. Z. Pitcher and J. B. Porter, U. S. A., and Messrs. Velpeau, Alcock and Jobert in support of his views. It is regarded as tending to produce gangrene and prevent union by the first intention.

The objections urged against chloroform we regard as not so much against its use as its abuse, for we have often witnessed in some of the large hospitals of Europe and this country, its employment to an extent apparently unnecessary, if not dangerous. Our author prefers sul ether as an anæsthetic. After commencing with ether, going to chloroform and resorting to a mixture of the two, we have settled down upon the use of chloroform and in its constant employment in private and hospital practice for the last eight years, not a single case has occurred in which any unfavorable effect has resulted from its use.

As this is a point of great importance, and the opinions and experience of Prof. Hamilton and others *seem* to conflict with our own, the following points concerning its use are presented as rendering it entirely safe:

1. Let the patient be lying down.

2. Do not give it where there is disease of the heart or brain, or when the respiration is imperfect.

3. Administer it slowly on a coarse napkin, and let the air of the room be fresh and not charged with the vapor.

4. It should not be given when the stomach is full, but if the patient be depressed, stimulants may be administered before hand.

5. Its effects should be carefully watched, so as not to carry it too far. Interruption of the respiration, pallor or blueness of the lips, stertor and irregular pulse are indications for suspending its use. When the patient no longer shows signs of consciousness when questioned, the effect is sufficient.

If these hints be observed, chloroform is safe, and although the patient will show signs of pain during the operation, he will have no recollection of it afterwards.

The chapter on camp dysentery, by Prof. Austin Flint, is very judicious and will repay a perusal by those in civil practice.

The Appendix contains a recruiting of miscellaneous items of interest to those in or desiring to enter the military service.

Prof. Hamilton is now in the military service near Washington, and has published some letters of interest relating to the health of the camp, etc. He is in a position to be useful to the profession as well as to the country, and the results of his extensive experience will be eagerly anticipated by the profession. B.

ALCOHOLIC DRINKS AND PHTHISIS.

From a paper by Prof. Austin Flint, in the *Am. Jour. Med. Sci.*, we extract the following judicious observations:

It is desirable, then, to inquire whether the statistical results given in the report by Prof. Davis warrant the conclusions which he draws from them. We propose to raise this inquiry.

Let us see, in the first place, whether Prof. Davis has pre-

sented all the postulates involved in the problem which he undertakes to solve. To determine the influence of alcoholic drinks on the development of phthisis, it is not enough to ascertain that a certain proportion of patients affected with this disease has been addicted to the use of these drinks. No one will assert that the use of alcoholic drinks affords an infaillible protection against the disease. The question is, whether they who habitually use these drinks are rendered thereby less liable to this disease than they would otherwise be. Now, it is ascertained that a certain proportion of a given number of patients affected with phthisis have been accustomed to use alcoholic drinks. This is one point in the problem. Another essential point is to ascertain whether this proportion falls below or exceeds the proportion who, in like manner, have used these drinks out of an equal number of non tuberculous persons in similar conditions of life. It is plain that we must have some standard of comparison by which to judge whether the proportion of drinkers among patients affected with phthisis be so large as to show an antagonizing influence of alcoholic drinks, or so small as to lead to an opposite conclusion. Prof. Davis appears not to have considered the importance of this in assuming that the results of the analysis of his cases leads to the conclusion which he draws from them. In fact, the statistical results of his analysis constitute but a preliminary step to the inquiry concerning the influence of alcoholic drinks on the development of pulmonary tuberculosis. Having obtained these results, the next point to be settled is, whether they show among tuberculous patients a large or small ratio of those who are addicted to the use of alcoholic drinks. How is this point to be settled? Plainly, the only way is to ascertain the ratio among patients not tuberculous, from the same classes of society of those who are equally addicted to the use of alcoholic drinks, and then institute a comparison of the results of the two analysis. Whether the results of Prof. Davis's analysis prove the influence of alcoholic drinks to be favorable to the development of phthisis, or otherwise, is thus, as we conceive, a problem to be settled by facts to which Prof. Davis makes no reference. In the absence of these facts, we have as much right to assume that the statistics given by Prof. Davis prove the prophylactic influence of alcoholic drinks, as he has to assume an opposite conclusion. Without assuming the former, we believe it will be found to be true.

The cases recorded by Prof. Davis occurred in hospital and

private practice. He does not state the proportion of hospital cases, but we infer that they constitute the large majority, from the fact that, of the 210 cases, in all but sixty the patients were foreigners, and the author indeed gives, as an explanation of the large number of patients from Ireland (85), the fact of his being brought into connection with this class in the Mercy Hospital of Chicago. We will suppose all the 210 cases to have been hospital cases. In 51 of these 210 cases, the patients had wholly abstained from the use of alcoholic drinks. This is certainly a large proportion of persons practising total abstinence to be found among the classes of patients received into a charity hospital. Would there be found 51 persons who had practised total abstinence for years among 210 hospital patients not affected with tuberculosis? But of the remaining 159 cases, in 91 the patients only used alcoholic drinks occasionally, some very sparingly and only on festive occasions. Now, it is absurd to suppose that an occasional indulgence, whether sparingly or in excess, is of any appreciable account in determining the influence of alcoholic drinks on the development of phthisis. These cases are to be excluded. So far as any influence is to be attributed to alcoholic drinks, the class of cases only is to be considered in which the persons "had used some form of alcoholic beverage almost daily from one to twelve years previous to the active signs of tuberculosis." To this class belong 68 of the 210 cases, or a fraction over 32 per cent. Now, is this a large or a small per centage? This question is to be answered after ascertaining the percentage of a similar class, as regards the use of alcoholic drinks, in 210 hospital cases not tuberculous. We are not in a situation, at the present moment, to appeal to facts, but we shall be surprised if they do not show a larger percentage; if so, assuming that Prof. Davis's cases were mostly hospital cases, his statistics will clearly prove the reverse of the inference which he deduces from them. Taking the statistics as they stand, we may reason *for* a prophylactic influence of alcoholic drinks precisely as Prof. Davis does *against* such an influence, and, as we conceive, with greater force. Prof. Davis's argument is, so large a proportion as 68 of 210 tuberculous patients being habitual drinkers, it is proved that alcoholic drinks exert no influence to prevent phthisis. *Per contra*, it may be said, so large a proportion as 142 of 210 tuberculous patients not being habitual drinkers, it is proved that alcoholic drinks do exert a positive influence in preventing phthisis.

With regard to the value of alcohol as a remedy in pulmo-

nary tuberculosis, Prof. Davis admits that an apparent improvement may be produced by it, but he says, "Truth compels me to say that I have never seen a case in which this apparent improvement was permanent." Inasmuch, however, as he states that the idea of alcoholic beverages preventing the development and retarding the progress of this disease when it was announced, was not in accordance with his views, and he began to collect cases in disapproval of this idea as long ago as 1855, it is fair to presume that he has not employed alcohol in the treatment of this disease to much extent. We confess ourselves to be among those who have been laid by clinical observation to attach no small value to alcoholic beverages in the treatment of phthisis. We are certainly able to cite a number of cases in which we have seen not merely a temporary, but a permanent improvement under their use, in conjunction with hygienic influences. But we reserve the consideration of this subject for some other occasion. * * * *

DE WITT COUNTY MEDICAL SOCIETY.

The Society met in the office of Dr. R. T. Richards, in Mt. Pleasant, Oct. 1st, 1861.

The meeting was called to order by the President at 10 o'clock A. M. The minutes of the previous meeting were read and approved.

Dr. R. T. Richards proposed Dr. J. R. Richards as a candidate for membership.

Society adjourned to meet at 2 o'clock P. M.

AFTERNOON SESSION.

The Censors, having examined the applicant, Dr. J. R. Richards, reported favorable to his election. Dr. Richards was then elected a member of the Society.

At a previous meeting of the Society, held in Marion, the first Tuesday in July last, Drs. Norris and Fairchild were expelled from the Society; but in order to give them an opportunity to come up and defend themselves, that portion of the minutes were not published. As they have not come up, therefore, the Society has resolved to sustain the proceedings of the previous meeting, and has ordered the Secretary to publish that portion of the minutes that were not published before, which is as follows:

Dr. Tyler charged Dr. Norris with unprofessional conduct.

Dr. Madden charged Dr. Fairchild with ungentlemanly, immoral, and unprofessional conduct. Drs. Norris and Fairchild were expelled from the Society.

On motion of Dr. Shurtleff, Dr. Waters was invited to participate in the meeting.

Essays being in order, Dr. R. T. Richards read an excellent essay on Typhoid Fever. The symptoms, pathology and treatment was in accordance with the general received opinions of the present day. After the reading of the essay there was a general discussion in reference to Typhoid fever.

Dr. Wright also read an essay, on Diphtheria, which was also followed by a lengthy discussion. Some regarded Diphtheria as being, primarily, a local disease; but nearly all looked upon it as being a disease of the whole system—the throat affection being only one of its local manifestations, or expressions.

Dr. Tyler offered the following resolutions, which were adopted:

Resolved, That a vote of thanks is due and is hereby tendered to Drs. Wright and Richards for their able essays read on the present occasion.

Resolved, That a vote of thanks be tendered to Dr. R. T. Richards, for the excellent dinner served up at the hotel for the members of this Society.

The President announced Pneumonia as the subject for general discussion at the next meeting.

Drs. Shurleff and J. R. Richards were appointed to read essays. Drs. Edmiston and Adams were continued.

On motion, the proceedings of this meeting were ordered to be published in the Central *Transcript* and Chicago Medical Journal.

On motion, the Society adjourned, to meet at Waupella the first Tuesday in January next, at 10 o'clock A. M.

JOHN WRIGHT, M. D., Secretary, *pro tem.*